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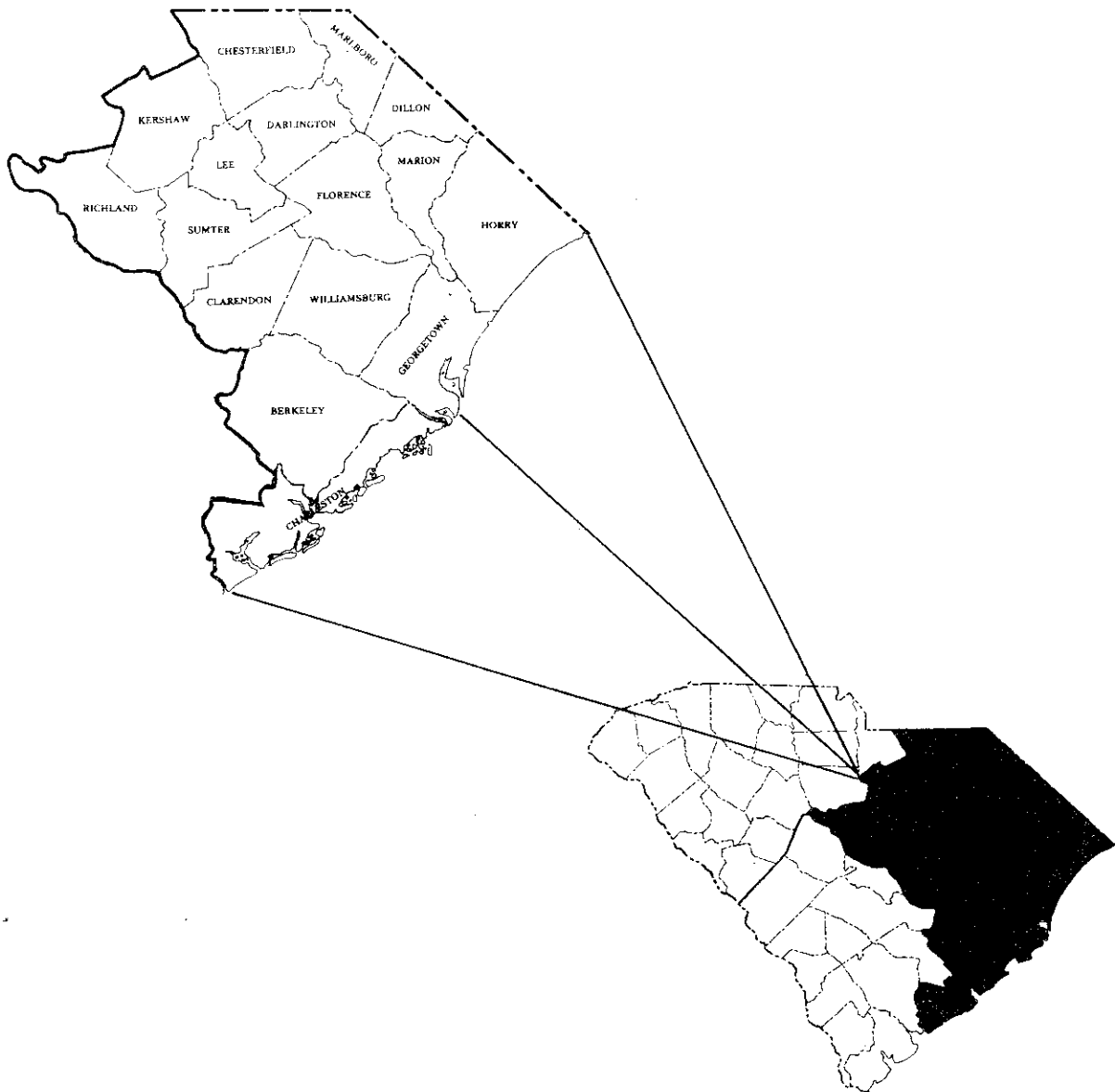


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Forest Statistics for the Northern Coastal Plain of South Carolina, 1986

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Southeastern Forest Experiment Station
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**Forest Statistics for
the Northern Coastal Plain
of South Carolina, 1986**

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Foreword

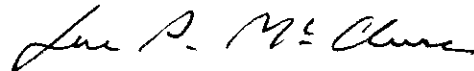
This report highlights the principal findings of the sixth forest survey in the Northern Coastal Plain of South Carolina. Fieldwork began in April 1986 and was completed in July 1986. Five previous surveys, completed in 1936, 1947, 1958, 1968, and 1978, provide statistics for measuring changes and trends over the past 50 years. The primary emphasis in this report is on the changes and trends since 1978. Previously reported figures have been adjusted to provide the best estimate of change.

Periodic surveys of the forest resource are authorized by the Forest and Rangeland Renewable Resources Research Act of 1978. These surveys are a continuing, nationwide undertaking by the Regional Experiment Stations of the USDA Forest Service. In Florida, Georgia, North Carolina, South Carolina, and Virginia, these surveys are administered by the Forest Inventory and Analysis (Forest Survey) Research Unit at the Southeastern Forest Experiment Station, with headquarters in Asheville, NC. The primary objective of the survey is to periodically inventory and evaluate all forest and related resources. These multi-resource data help provide a basis for formulating forest policies and programs and for the orderly development and use

of the resources. This report deals only with the extent and condition of forest land, associated timber volumes, and rates of timber growth and removals.

The 16-county area covered by this report is one of three survey units in South Carolina. A similar report, USDA Forest Service Resource Bulletin SE-89 has been issued for the Piedmont of South Carolina. A comparable report for the Southern Coastal Plain unit will be issued as the statewide inventory progresses. When completed, the inventory will provide updated statistics on the timber resource for all of South Carolina.

The Southeastern Station gratefully acknowledges the cooperation and assistance provided by the South Carolina Forestry Commission in collecting field data. Appreciation is also expressed for the excellent cooperation of other public agencies, forest industry, and other private landowners in providing information and access to the sample locations.



JOE P. McCLURE
Project Leader

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Since 1978 in the Northern Coastal Plain of South Carolina--

- area of timberland declined by 177,000 acres, or by nearly 4 percent. Almost 247,000 acres of timberland were diverted to other land uses. Of the area diverted, about one-half was for urban development and 41 percent went to agricultural uses. The remainder became reserved timberland. An additional 26,000 acres of timberland were transferred to adjacent survey units because of county boundary changes. About 96,000 acres were added to the timberland base during the same period. Timberland in this 16-county region totals 4.6 million acres, approximately 61 percent of the total land area.

- forest industry has increased its timberland holdings by approximately 124,000 acres, or by 11 percent. Forest industry controls nearly 28 percent of the timberland in the region. Nonindustrial private forest (NIPF) landowners control 2.8 million acres, 11 percent less than in 1978. Within the NIPF group, farm timberland acreage dropped by 32 percent to 1.1 million acres, whereas area of timberland in the other individual category increased by 17 percent to 1.2 million acres. Other corporate timberland acreage changed little, remaining at just under 0.5 million acres.

- the proportions of timberland occupied by softwood, hardwood, and oak-pine types have remained constant. Softwood types account for about 42 percent, oak-pine types make up more than 13 percent, and hardwood types compose 45 percent of the total timberland area. Increases occurred in all three broad types on both forest industry and public lands but were negated by declines across all three classes of NIPF land. Within the softwood type grouping, the area of loblolly forest type increased by 7 percent but the area of all other types declined. This increase reflects the use of loblolly pine for plantation establishment. Pine plantation acreage increased from 443,000 to 654,000 acres in the region.

- more than 96,000 acres have been harvested annually and retained in timberland. Of the area harvested, about 6 of 10 acres were in NIPF ownership and one-third was on land controlled by forest industry. About one-half of the annual harvest was from pine types, 18 percent from oak-pine, and 29 percent from hardwood types. Pine plantations accounted for 5 percent of the area harvested. When all types are grouped, an additional 49,000 acres experienced partial cutting or some intermediate silvicultural treatment each year.

- an average of 93,000 acres had been regenerated annually to adequate stocking levels, about 3 percent less than the area harvested. Of the total area regenerated, 36 percent was planted. Nearly 71 percent of the artificial regeneration was on forest industry land. The annual rate of planting on NIPF land has increased by about 2.5 times, while that on forest industry land is up 55 percent. On NIPF land, the total area regenerated yearly by all methods is 91 percent of the area harvested annually; on forest industry land, acreage regenerated exceeds the annual harvested area by 9 percent. Three-fourths of the area naturally regenerated was on NIPF land. Across all ownerships, the total area regenerated to pine types each year was about 94 percent of the area of pine stands harvested.

- average basal area of live trees 5.0 inches d.b.h. and larger has increased from 72 to 75 square feet per acre of timberland. Basal area in longleaf-slash types increased by almost 29 percent, possibly because of fewer young stands being established in this type. The average basal area per acre of loblolly-shortleaf and oak-pine stands declined slightly. The acreage of sapling-size stands in this type has increased, partially accounting for this decline. Average merchantable volume per acre has increased by 4 percent to 1,677 cubic feet. Average volume increased in pine types by 7 percent, declined in lowland hardwood types by 7 percent, and remained fairly constant in oak-pine and upland hardwood types.

- for both softwoods and hardwoods, number of live trees declined in all diameter classes through the 16-inch class. Declines were greatest in the sapling-size classes. Numbers of hardwoods dropped by 18 and 12 percent in the 2- and 4-inch diameter classes. In these classes, the number of softwoods declined by 17 and 16 percent, respectively. Acreage shifts from NIPF to forest industry ownership buffered the loss of trees on forest industry land while exaggerating the loss on NIPF land.

- volume of softwood growing stock increased by 4 percent to 3.4 billion cubic feet. Small declines in softwood volume occurred in all diameter classes below the 16-inch class except the 8-inch class. Volume in the 8-inch class increased by less than 1 percent. Almost all of the net gain in softwood volume can be attributed to a combined 25 percent volume increase in the 18-inch and larger diameter classes. Reductions in the volume of shortleaf, pond, and long-leaf pines were more than offset by an 8 percent increase in loblolly volume amounting to almost 175 million cubic feet. The current inventory of softwood growing stock includes 14.1 billion board feet of sawtimber.

- volume of hardwood growing stock increased by 6 percent to 3.6 billion cubic feet. Gains occurred in all diameter classes. Increases in the volume of yellow-poplar and soft maples accounted for about one-half of the gain; an increase in the volume of red oaks accounted for another one-third. The current inventory of hardwood growing stock includes 11.3 billion board feet of sawtimber, an increase of 6 percent. Merchantable volume of live hardwoods, which includes both growing stock and cull material, declined by 1 percent. A larger proportion of the hardwood resource qualified as growing stock material in this survey than in the last, accounting for the apparent contradiction in trends for live and growing-stock hardwood volume.

In 1985

- net annual growth of softwood growing stock totaled 177 million cubic feet, down 9 percent from the 196 million cubic feet in 1977. All of the reduction occurred on NIPF land, where net annual growth declined by 18 percent. Softwood net annual growth on forest industry land increased slightly. An overall increase in the area of timberland in forest industry ownership, and also a large buildup in the area of pine plantations in the 11-20 and 21-30 stand-age classes, contributed to this increase. Net annual growth of hardwood growing stock declined by 27 percent to 98 million cubic feet. Reductions in growth on NIPF land accounted for more than three-fourths of the total growth decline; however, reductions occurred in all ownerships. Losses ranged from 21 percent on public land to 28 percent on NIPF land. Net annual growth was down by one-fourth on industry land. The combined net growth of live softwood and hardwood trees 5.0 inches d.b.h. and larger averaged 62 cubic feet per acre of timberland, compared with 75 cubic feet in 1977. About 77 percent of this loss was due to a reduction in hardwood growth per acre.

- annual mortality of softwood growing stock totaled 21 million cubic feet. Since 1977, softwood mortality has declined by more than 26 percent. Softwood growing-stock mortality included 55 million board feet of sawtimber. Mortality of hardwood growing stock totaled 25 million cubic feet, an increase of 37 percent. Mortality reduced hardwood gross growth by 20 percent in 1985, compared with only 12 percent in 1977. Hardwood growing stock mortality included 78 million board feet of sawtimber.

- annual removals of softwood growing stock totaled 160 million cubic feet, an increase of 18 percent since 1977. Softwood removals increased by 8, 15, and 23 percent on public, forest industry, and NIPF lands, respectively. Nevertheless, softwood removals remain slightly below net annual growth in all owner classes. Hardwood removals increased by 22 per-

cent and now total 74 million cubic feet. Hardwood growth exceeds removals by more than one-third; however, the surplus is much reduced from 1977 when hardwood growth exceeded removals two-fold. Increases in annual hardwood removals on NIPF land made up more than three-fourths of the total increase. On public and NIPF lands, hardwood growth continues to exceed removals. On forest industry land, hardwood removals exceed net growth by 13 percent.

* * * * *

These new findings substantiate the results of an interim survey conducted in 1983, which suggested decreases in net annual growth and increases in annual removals of yellow pine since 1977. Since ownership statistics were not updated in the interim survey, the changes in growth and removals reported here by ownership differ somewhat from those indicated by the interim survey. Because forest industry has acquired additional timberland in the region, the current findings differ somewhat from those reported in 1983. A reduction in area of NIPF timberland resulted in greater changes in components of change within this owner group than expected. Across all ownerships, the interim survey accurately identified a reduction in net annual growth and an increase in remov-

als. The magnitude of these changes for the entire remeasurement period is greater than previously reported. Although changes in number of yellow pines by ownership class have also been confounded by land transfers between owner classes, the actual decline in number of stems across all ownership and diameter classes is also greater than reported in 1983.

Since hardwoods were not remeasured in the interim survey, the large decrease in hardwood growth and increases in removals and mortality were not identified until now. Causes of the decline in growth deserve further study. Increased mortality, less ingrowth, slower survivor growth, and a reduction in the timberland base and numbers of trees are contributing factors.

A redesignation of unit boundaries since the previous survey transferred approximately 25,000 acres of timberland from Kershaw County, located in the Northern Coastal Plain, to Lancaster County, located in the Piedmont. An additional 1,400 acres were reported as being annexed from Charleston County in the Northern Coastal Plain to Colleton County in the Southern Coastal Plain. Changes in the timberland resource that occurred as a result of these losses are reflected in the reported statistics.

How the Inventory is Made

The method of the inventory is a sampling procedure designed to provide reliable statistics primarily at the State and Survey Unit levels. Individual county statistics are presented so that any combination of counties may be added together until a total is large enough to meet the desired degree of reliability. Procedures were as follows:

1. Initial estimates of forest and nonforest areas were based on the classification of 20,949 sample clusters systematically spaced on the latest aerial photographs available. A subsample of 1,961 of the 16-point clusters was ground checked, and a linear regression was fitted to the data to develop the relationship between the photo and ground classification of the subsample. This procedure provides a means for adjusting the initial estimates of area for change in land use since date of photography and for photo misclassifications.

2. Estimates of timber volume and forest classifications were based on measurements recorded at 1,919 ground sample locations systematically distributed on timberland. The plot design at each location was based on a cluster of 10 points. In most cases, variable plots, established by using a basal-area factor of 37.5 square feet per acre, were systematically spaced within a single forest condition at 5 of the 10 cluster points. Trees less than 5 inches d.b.h. were tallied on a fixed-radius plot around each point center.

3. Equations prepared from detailed measurements collected on standing trees in this Unit, and similar measurements taken throughout the Southeast, were used to compute the volume of individual tally trees. A mirror caliper and sectional aluminum poles were used to obtain the additional measurements on these standing trees required to construct volume equations.

4. Felled trees were measured at 34 active cutting operations. These data will supplement the standing-tree volume data and be used to generate utilization factors for product and species groups. Forest biomass estimates were made from equations developed by the Utilization of Southern Timber Research Work Unit of the Southeastern Forest Experiment Station in Athens, GA.

5. Estimates of growth, removals, and mortality were determined from the remeasurement of 1,956 permanent sample plots established in the fourth survey.

6. Ownership information was collected from correspondence, public records, and local contacts. In those counties where the sample missed a particular ownership class, temporary sample plots were added.

7. All field data were sent to Asheville for editing and were entered into disk and magnetic-tape storage for processing. Final estimates were based on statistical summaries of the data.

Reliability of the Data

Statistical analysis of these data indicates the following sampling errors in terms of one standard error (two times out of three):

	<u>Percent</u>
Per million acres of	
timberland	0.91
Per billion cubic feet of	
growing stock.	5.85
Per billion cubic feet of	
net annual growth.	1.10
Per billion cubic feet of	
annual removals.	2.54

Sampling errors for county and unit totals,^a in terms of one standard error, Northern Coastal Plain of South Carolina, 1986

County	Timberland area	Cubic-foot volume of growing stock		
		Inventory	Growth	Removals
----- <u>Sampling error</u> ^b -----				
Berkeley	0.97	5.84	6.01	12.81
Charleston	2.39	7.92	7.56	17.67
Chesterfield	1.21	8.73	8.80	28.57
Clarendon	2.26	10.61	9.51	26.49
Darlington	2.07	13.80	12.70	24.29
Dillon	2.33	11.51	9.22	36.46
Florence	1.52	8.03	7.98	18.06
Georgetown	1.24	7.97	7.94	16.02
Horry	1.49	6.98	6.41	16.91
Kershaw	1.27	8.65	7.91	18.14
Lee	2.57	14.92	17.47	37.38
Marion	1.84	10.44	9.50	25.82
Marlboro	2.17	8.68	9.41	37.22
Richland	1.71	7.95	8.78	17.96
Sumter	2.34	9.88	8.54	29.76
Williamsburg	1.33	6.49	6.52	16.91
Total	.42	2.20	2.10	5.25

^aSampling error of breakdowns of county and unit totals may be computed with the following formula:

$$E = \frac{(SE) \sqrt{(\text{Specified volume or area})}}{\sqrt{(\text{Volume or area total in question})}}$$

Where: E = Sampling error of the volume or area total in question

SE = Specified sampling error in table.

^bBy random-sampling formula (in percent).

Definitions of Terms

Allowable cut. The volume of timber that could be cut on timberland during a given period under specified management plans aimed at sustained production of timber products.

Basal area. The area in square feet of the cross section at breast height of a single tree or of all the trees in a stand, usually expressed as square feet of basal area per acre.

Biomass. The aboveground green weight of solid wood and bark in live trees 1.0 inch d.b.h. and larger from the ground to the tip of the tree. All foliage is excluded. The weight of wood and bark in lateral limbs, secondary limbs, and twigs under 0.5 inch in diameter at the point of occurrence on sapling-size trees is included but is excluded on poletimber and sawtimber-size trees.

Bole. That portion of a tree between a 1-foot stump and a 4-inch top diameter outside bark (d.o.b.) in trees 5.0 inches d.b.h. and larger.

Broad management class. A classification of timberland based on forest type and stand origin.

Pine plantation. Stands that have been artificially regenerated by planting or direct seeding and with a southern yellow pine, white pine-hemlock, or other softwood forest type.

Natural pine. Stands that have not been artificially regenerated and with a southern yellow pine, white pine-hemlock, or other softwood forest type.

Oak-pine. Stands with a forest type of oak-pine.

Upland hardwood. Stands with a forest type of oak-hickory, chestnut oak, southern scrub oak, or maple-beech-birch.

Lowland hardwood. Stands with a forest type of oak-gum-cypress, elm-ash-cottonwood, palm, or other tropical.

Bureau of Land Management lands. Federal lands administered by the Bureau of Land Management.

Census water. Streams, sloughs, estuaries, canals, and other moving bodies of water one-eighth of a statute mile in width and greater, and lakes, reservoirs, ponds, and other permanent bodies of water 40 acres in area and greater.

Commercial forest land. (see: Timberland).

Commercial species. Tree species conventionally regarded as being able to develop into trees suitable for the manufacture of industrial timber products. Species that typically exhibit small size, poor form, or inferior quality are excluded.

Cropland. Land under cultivation within the past 24 months, including orchards and land in soil-improving crops but excluding land cultivated in developing improved pasture. Also includes idle farmland.

D.b.h. Tree diameter (outside bark) at breast height (4.5 feet above the ground).

Diameter class. A classification of trees based on tree d.b.h. Two-inch diameter classes are commonly used by Forest Inventory and Analysis, with the even inch as the approximate midpoint for a class. For example, the 6-inch class includes trees 5.0 through 6.9 inches d.b.h.

Farm. Land on which agricultural operations are being conducted and sale of agricultural products totaled \$1,000 or more during the year.

Farm operator. A person who operates a farm, either doing the work himself or directly supervising the work.

Farmer-owned land (see: Other private land).

Forest industry land. Land owned by companies or individuals operating wood-using plants.

Forest industry leased land. Land leased or under management contracts to forest industry from other owners for periods of one forest rotation or longer. Land under cutting contracts is not included.

Forest land. Land at least 16.7 percent stocked by forest trees of any size, or formerly having had such tree cover, and not currently developed for nonforest use.

Forest type. A classification of forest land based on the species forming a plurality of live-tree stocking.

White pine-hemlock. Forests in which eastern white pine, red pine, or jack pine, singly or in combination, constitute a plurality of the stocking. (Common associates include hemlock, birch, and maple.)

Spruce-fir. Forests in which spruce or true firs, singly or in combination, constitute a plurality of the stocking. (Common associates include maple, birch, and hemlock.)

Longleaf-slash pine. Forests in which longleaf or slash pine, singly or in combination, constitute a plurality of the stocking. (Common associates include oak, hickory, and gum.)

Loblolly-shortleaf pine. Forests in which loblolly pine, shortleaf pine, or other southern yellow pines, except longleaf or slash pine, singly or in combination, constitute a plurality of the stocking. (Common associates include oak, hickory, and gum.)

Oak-pine. Forests in which hardwoods (usually upland oaks) constitute a plurality of the stocking but in which pines account for 25 to 50 percent of the stocking. (Common associates include gum, hickory, and yellow-poplar.)

Oak-hickory. Forests in which upland oaks or hickory, singly or in combination, constitute a plurality of the stocking, except where pines account for 25 to 50 percent, in which case the stand would be classified oak-pine. (Common associates include yellow-poplar, elm, maple, and black walnut.)

Oak-gum-cypress. Bottom-land forests in which tupelo, blackgum, sweetgum, oaks, or southern cypress, singly or in combination, constitute a plurality of the stocking, except where pines account for 25 to 50 percent, in which case the stand would be classified oak-pine. (Common associates include cottonwood, willow, ash, elm, hackberry, and maple.)

Elm-ash-cottonwood. Forests in which elm, ash, or cottonwood, singly or in combination, constitute a plurality of the stocking. (Common associates include willow, sycamore, beech, and maple.)

Maple-beech-birch. Forests in which maple, beech, or yellow birch, singly or in combination, constitute a plurality of the stocking. (Common associates include hemlock, elm, basswood, and white pine.)

Palm, other tropical. Forests in which palms and other tropicals constitute a plurality of the stocking.

Gross growth. Annual increase in merchantable volume of trees in the absence of cutting and mortality. (Gross growth includes survivor growth, ingrowth, growth on ingrowth, growth on removals prior to removal, and growth on mortality prior to death.)

Growing-stock trees. Live sawtimber-size trees of commercial species containing at least a 12-foot log, or two noncontiguous saw logs each 8 feet or longer, meeting minimum grade requirements (hardwoods must qualify as a log grade of either 3 or 4; softwoods must qualify as a log grade 3) with at least one-third of the gross board-foot volume (International 1/4-inch rule) between a 1-foot stump and the minimum saw-log top being sound, or a live tree below sawtimber size that will prospectively qualify under the above standards.

Desirable tree. A tree that qualifies as growing stock and has no serious defects in quality limiting present or prospective use; is of relatively high vigor (30 percent or more live crown ratio); is compatible with the site and

physiographic class; has a total board-foot loss not to exceed 15 percent in softwoods or 25 percent in hardwoods as a result of severe sweep, crook, or lean; and has a relatively clear bole.

Acceptable tree. A tree that qualifies as growing stock but does not meet the minimum requirements to qualify as a desirable tree. Included are sawtimber-size trees that do not contain a 12-foot saw log because of excessive, natural taper in the butt log but have the potential to produce a 12-foot saw log as diameter increases.

Growing-stock volume. Volume (cubic feet) of solid wood in growing-stock trees 5.0 inches d.b.h. and larger, from a 1-foot stump to a minimum 4.0-inch top diameter, outside bark, on the central stem. Volume of solid wood in primary forks from the point of occurrence to a minimum 4.0-inch top diameter outside bark is included.

Hardwoods. Angiosperms; dicotyledonous trees (including all palm species which are monocotyledonous), usually broadleaf and deciduous.

Soft hardwoods. Soft-textured hardwoods such as boxelder, red and silver maples, hackberry, loblolly-bay, sweetgum, yellow-poplar, magnolia, sweetbay, water tupelo, blackgum, sycamore, cottonwood, black cherry, willow, basswood, and elm.

Hard hardwoods. Hard-textured hardwoods such as sugar maple, birch, hickory, dogwood, persimmon (forest grown), black locust, beech, ash, honeylocust, holly, black walnut, mulberry, and all commercial oaks.

Idle farmland. Land including former cropland, orchard, improved pasture, and farm sites not tended within the past 2 years, and currently less than 16.7 percent stocked with live trees.

Improved pasture. Land currently improved for grazing by cultivation, seeding, irrigation, or clearing of trees or brush.

Indian land. All lands held in trust by the United States for individual Indians or tribes, or all lands, titles to which are held by individual Indians or tribes, subject to Federal restrictions against alienation.

Industrial wood. All roundwood products except fuelwood.

Ingrowth. The number or net volume of trees that grow large enough during a specified year to qualify as saplings, poletimber, or sawtimber.

Inhibiting vegetation. Cover sufficiently dense to prevent the establishment of tree seedlings.

Land area. The area of dry land and land temporarily or partly covered by water such as marshes, swamps, and river flood plains (omitting tidal flats below mean high tide), streams, sloughs, estuaries, and canals less than one-eighth of a statute mile in width, and lakes, reservoirs, and ponds less than 40 acres in area.

Live trees. All trees 1.0 inch d.b.h. and larger which are not dead at the time of inventory.

Live-tree volume. Volume (cubic feet) of wood above the ground line in live trees 1.0 inch d.b.h. and larger. The volume in twigs and lateral limbs smaller than 0.5 inch in diameter at the point of occurrence on sapling-size trees is included but is excluded on poletimber and sawtimber-size trees.

Log grade. A classification of logs based on external characteristics as indicators of quality or value.

Logging residues. The unused merchantable portion of growing-stock trees cut or destroyed during logging operations.

Logging slash. The unmerchantable portion of growing-stock trees (including saplings) plus all cull trees 1.0 inch d.b.h. and larger cut or destroyed during logging operations and not used.

Manageable stand. Timberland at least 60 percent stocked with growing-stock trees that can be featured together under a management scheme.

Merchantable portion. That portion of live trees 5.0 inches d.b.h. and larger between a 1-foot stump and a minimum 4.0-inch top diameter outside bark on the central stem. That portion of primary forks from the point of occurrence to a minimum 4.0-inch top diameter outside bark is included.

Merchantable volume. Solid-wood volume in merchantable portion of live trees.

Miscellaneous Federal land. Federal land other than national forests, land administered by the Bureau of Land Management, and land administered by the Bureau of Indian Affairs.

Miscellaneous private land. (see: Other private land).

Mortality. The merchantable volume in trees that have died from natural causes during a specified period.

National Forest land. Federal land that has been legally designated as national forests or purchase units, and other land under the administration of the Forest Service, including experimental areas and Bankhead-Jones Title III land.

Net annual growth. The net change in merchantable volume for a specific year in the absence of cutting (gross growth minus mortality for that specified year.)

Net volume. Gross volume of wood less deductions for rot, sweep, or other defect affecting use for timber products.

Noncommercial species. Tree species of typically small size, poor form, or inferior quality which normally do not develop into trees suitable for industrial wood products.

Nonforest land. Land that has never supported forests and land formerly forested where timber production is precluded by development for other uses.

Nonindustrial private forest (NIPF) land. (see: Other private land).

Nonstocked forest land. Timberland less than 16.7 percent stocked with growing-stock trees.

Other private land. Privately owned land excluding forest industry land or forest industry leased land. Also referred to as nonindustrial private forest (NIPF) land.

Farmer-owned land. Owned by farm operators, excluding incorporated farm ownerships.

Other individual land. Owned by individuals other than farm operators.

Other corporate land. Owned by corporations, including incorporated farm ownerships.

Other removals. The growing-stock volume of trees removed from the inventory by cultural operations such as timber stand improvement, land clearing, and other changes in land use that result in the removal of the trees from the timberland.

Plant residues. Wood material generated in the production of timber products at primary manufacturing plants.

Coarse residues. Material, such as slabs, edgings, trim, veneer cores and ends, which is suitable for chipping.

Fine residues. Material, such as sawdust, shavings, and veneer chippings, which is not suitable for chipping.

Plant byproducts. Residues (coarse or fine) utilized in the further manufacture of industrial products or for consumer use, or utilized as fuel.

Unused plant residues. Residues (coarse or fine) that are not used for any product, including fuel.

Poletimber-size trees. Live trees at least 5.0 inches d.b.h. but smaller than sawtimber size.

Productive-reserved forest land. (see: Reserved timberland).

Quality class. A classification of sawtimber volume by log or tree grades.

Rangeland. Land on which the natural vegetation is predominantly native grasses, grasslike plants, forbs, or shrubs valuable for forage, not qualifying as timberland and not developed for another land use. Rangeland includes natural grassland and savannah.

Reserved timberland. Forest land sufficiently productive to qualify as timberland, but withdrawn from timber utilization through statute or administrative designation.

Rotten trees. Live trees of commercial species that do not contain at least one 12-foot saw log, or two noncontiguous saw logs, each 8 feet or longer, now or prospectively, primarily because of rot or missing sections, and with less than one-third of the gross board-foot tree volume in sound material.

Rough trees. Live trees of commercial species that do not contain at least one 12-foot saw log, or two noncontiguous saw logs, each 8 feet or longer, now or prospectively, primarily because of roughness, poor form, splits, and cracks, and with less than one-third of the gross board-foot tree volume in sound material; and live trees of non-commercial species.

Roundwood (roundwood logs). Logs, bolts, or other round sections cut from trees for industrial or consumer uses.

Roundwood chipped. Any timber cut primarily for pulpwood, delivered to non-pulpmills, chipped, and then sold to pulpmills as residues, including chipped tops, jump sections, whole trees, and pulpwood sticks.

Roundwood products. Any primary product such as lumber, poles, pilings, pulp, or fuelwood which is produced from roundwood.

Salvable dead trees. Standing or down dead trees considered utilizable by Forest Inventory and Analysis standards.

Saplings. Live trees 1.0 to 5.0 inches d.b.h.

Saw log. A log meeting minimum standards of diameter, length, and defect, including logs at least 8 feet long, sound and straight, and with a minimum diameter inside bark for softwoods of 6 inches (8 inches for hardwoods).

Saw-log portion. That part of the bole of sawtimber trees between a 1-foot stump and the saw-log top, including the portion of forks large enough to contain a saw log.

Saw-log top. The point on the bole of sawtimber trees above which a conventional saw log cannot be produced. The minimum saw-log top is 7.0 inches in diameter outside bark (d.o.b.) for softwoods and 9.0 inches (d.o.b.) for hardwoods.

Sawtimber-size trees. Softwoods 9.0 inches d.b.h. and larger and hardwoods 11.0 inches d.b.h. and larger.

Sawtimber volume. Growing-stock volume in the saw-log portion of sawtimber-size trees in board feet (International 1/4-inch rule).

Seedlings. Live trees of commercial species less than 1.0 inch d.b.h. that are expected to survive and develop.

Site class. A classification of forest land in terms of inherent capacity to grow crops of industrial wood based on fully stocked natural stands, by annual production capacity.

Class 1. 165 or more cubic feet per acre.

Class 2. 120 to 164 cubic feet per acre.

Class 3. 85 to 119 cubic feet per acre.

Class 4. 50 to 84 cubic feet per acre.

Class 5. 20 to 49 cubic feet per acre.

Softwoods. Gymnosperms; in the order Coniferales, usually evergreen (includes

the genus Taxodium which is deciduous), having needles or scalelike leaves.

Pines. Yellow pine species which include loblolly, longleaf, slash, pond, shortleaf, pitch, Virginia, sand, spruce, and Table Mountain pines.

Other softwoods. Cypress, eastern red-cedar, white cedar, eastern white pine, eastern hemlock, spruce, and fir.

Stand-size class. A classification of forest land based on the diameter class distribution of growing-stock trees in the stand.

Sawtimber stands. Stands at least 16.7 percent stocked with growing-stock trees, with half or more of total stocking in sawtimber and poletimber trees, and with sawtimber stocking at least equal to poletimber stocking.

Poletimber stands. Stands at least 16.7 percent stocked with growing-stock trees of which half or more of total stocking is in poletimber and sawtimber trees, and with poletimber stocking exceeding that of sawtimber.

Sapling-seedling stands. Stands at least 16.7 percent stocked with growing-stock trees of which more than half of total stocking is saplings and seedlings.

State, county, and municipal land. Land owned by States, counties, and local public agencies or municipalities, or land leased to these governmental units for 50 years or more.

Stocking. The degree of occupancy of land by trees, measured by basal area or the number of trees in a stand and spacing in the stand, compared with a minimum standard, depending on tree size, required to fully utilize the growth potential of the land.

Fully stocked. 100 percent or more stocking.

Medium stocked. 60 to 99 percent stocking.

Poorly stocked. Less than 60 percent stocking.

Survivor growth. The merchantable volume increment on trees 5.0 inches d.b.h. and larger in the inventory at the beginning of the year and surviving to its end.

Timberland. Land at least 16.7 percent stocked by forest trees of any size, or formerly having had such tree cover, not currently developed for nonforest use, capable of producing 20 cubic feet of industrial wood per acre per year and not withdrawn from timber utilization by legislative action.

Timber products. Roundwood products and byproducts.

Timber removals. The merchantable volume of trees removed from the inventory by harvesting, cultural operations such as stand improvement, land clearing, or changes in land use.

Top. The portion of the main stem and forks from a 4.0-inch diameter outside bark to the tips of the main stem and forks, plus all other limbs above the 4.0-inch top at least 0.5 inch in diameter at their point of occurrence.

Treatment opportunity. A classification of the management or treatment that would most improve for timber production the existing condition of the stand being sampled.

Tree grade. A classification of sawtimber trees based on the log grade of the butt log in the tree.

Unproductive forest land. (see: Woodland).

Upper-stem portion. That part of the main stem or fork of sawtimber trees above the saw-log top to minimum top diameter 4.0 inches outside bark or to the point where the main stem or fork breaks into limbs.

Urban and other areas. Areas developed for residential, industrial, or recreational purposes, school yards, cemeteries, roads, railroads, airports, beaches, powerlines and other rights-of-way, or other nonforest land not included in any other specified land use class.

Woodland. Forest land incapable of producing 20 cubic feet per acre per year of industrial wood under natural conditions, because of adverse site conditions.

Stocking Standard

D.b.h. class	Minimum number of trees per acre for full stocking	Minimum basal area per acre for full stocking
Seedlings	600	--
2	560	--
4	460	--
6	340	67
8	240	84
10	155	85
12	115	90
14	90	96
16	72	101
18	60	106
20	51	111

Conversion factors

Cubic feet of wood per average cord
(excluding bark)

D.b.h. class	All species	Pine	Other softwood	Hardwood
6	60.5	61.0	68.2	60.0
8	68.5	68.1	76.0	68.4
10	73.4	73.1	81.4	73.4
12	76.7	76.7	85.2	76.4
14	79.1	79.4	88.2	78.4
16	81.0	81.6	90.4	79.8
18	82.3	83.3	92.3	80.8
20	83.5	84.8	93.8	81.5
22	84.2	86.0	95.1	82.1
24+	85.3	87.8	97.4	83.1
Average	75.8	75.9	88.3	75.0

Metric equivalents of units used in this report

1 acre = 4,046.86 square meters or 0.404686 hectare
 1 cubic foot = 0.028317 cubic meter
 1 inch = 2.54 centimeters or 0.0254 meter
 Breast height = 1.4 meters above ground level
 1 square foot = 929.03 square centimeters or 0.0929 square meter
 1 square foot per acre basal area = 0.229568 square meter per hectare
 1 pound = 0.454 kilogram
 1 ton = 0.907 metric ton

County Tables

The county tables are intended for use in compiling forest resource estimates for groups of counties. Because the sampling procedure used by the Forest Survey was intended primarily to furnish inventory data for the survey unit as a whole, individual county estimates have limited and variable accuracy. As county totals are broken down by various subdivisions, the possibility of error increases and is greatest for the smallest items. The order of this increase can be computed with the formula on page 5.

Table 1.--Area, by county and land class, Northern Coastal Plain of South Carolina, 1986

County	All land ^a	Forest land				Nonforest land ^b
		Total	Timberland	Woodland	Reserved timberland	
----- Acres -----						
Berkeley	708,941	551,280	548,679	--	2,601	157,661
Charleston	600,090	288,245	275,401	--	12,844	311,845
Chesterfield	513,280	342,476	341,962	--	514	170,804
Clarendon	385,222	205,157	205,157	--	--	180,065
Darlington	360,173	179,228	179,228	--	--	180,945
Dillon	259,744	144,069	144,069	--	--	115,675
Florence	514,694	274,517	274,517	--	--	240,177
Georgetown	525,933	385,288	383,681	--	1,607	140,645
Horry	731,482	453,658	453,646	--	12	277,824
Kershaw	462,829	345,740	345,740	--	--	117,089
Lee	263,080	119,706	119,706	--	--	143,374
Marion	315,398	205,622	205,622	--	--	109,776
Marlboro	308,858	171,337	171,337	--	--	137,521
Richland	487,411	320,106	304,971	--	15,135	167,305
Sumter	425,446	231,958	231,958	--	--	193,488
Williamsburg	597,850	389,201	389,201	--	--	208,649
Total	7,460,431	4,607,588	4,574,875	--	32,713	2,852,843

^aFrom U.S. Bureau of the Census, 1980.

^bIncludes 93,765 acres of water according to Forest Survey standards of area classification, but defined by the Bureau of Census as land.

Table 2.--Area of timberland, by county and ownership class, Northern Coastal Plain of South Carolina, 1986

County	All ownerships	Ownership class							
		National Forest	Miscellaneous Federal	State	County and municipal	Forest industry ^a	Other private		
							Farmer	Corporate	Individual
----- Acres -----									
Berkeley	548,679	184,022	9,550	16,583	554	187,391	55,929	30,116	64,534
Charleston	275,401	47,247	601	1,745	880	61,838	41,347	41,347	80,396
Chesterfield	341,962	--	43,150	51,854	336	42,309	98,788	17,962	87,563
Clarendon	205,157	--	2,404	5,168	165	44,629	93,107	21,486	38,198
Darlington	179,228	--	--	1,907	499	34,716	54,657	21,862	65,587
Dillon	144,069	--	--	791	240	36,059	64,188	8,023	34,768
Florence	274,517	--	--	2,988	901	48,702	125,758	12,329	83,839
Georgetown	383,681	--	--	5,291	1,016	221,240	28,190	47,708	80,236
Horry	453,646	--	1,730	872	353	151,233	114,498	68,259	116,701
Kershaw	345,740	--	--	1,098	1,682	84,617	66,892	46,133	145,318
Lee	119,706	--	67	2,793	60	15,165	52,183	2,747	46,691
Marion	205,622	--	--	10	185	101,423	41,602	2,080	60,322
Marlboro	171,337	--	--	50	82	69,660	69,478	8,017	24,050
Richland	304,971	--	44,422	5,787	439	40,413	21,607	54,018	138,285
Sumter	231,958	--	205	46,270	656	17,292	66,133	39,679	61,723
Williamsburg	389,201	--	--	--	194	108,779	141,291	32,968	105,969
Total	4,574,875	231,269	102,129	143,207	8,242	1,265,466	1,135,648	454,734	1,234,180

^aIncludes 40,913 acres of other private land under long-term lease.

Table 3.--Area of timberland, by county and forest-type group, Northern Coastal Plain of South Carolina, 1986

County	All type groups	Forest-type group									
		White pine-hemlock	Spruce-fir	Longleaf-slash	Loblolly-shortleaf	Oak-pine	Oak-hickory	Oak-gum-cypress	Elm-ash-cottonwood	Maple-beech-birch	
					Acres						
Berkeley	548,679	--	--	35,641	254,652	65,672	50,139	132,927	9,648	--	
Charleston	275,401	--	--	18,812	107,117	52,884	58,781	37,807	--	--	
Chesterfield	341,962	--	--	104,182	66,157	39,373	88,929	34,076	9,245	--	
Clarendon	205,157	--	--	738	56,123	25,350	12,030	110,916	--	--	
Darlington	179,228	--	--	7,721	41,152	27,399	38,495	56,191	8,270	--	
Dillon	144,069	--	--	--	42,081	27,677	10,992	63,319	--	--	
Florence	274,517	--	--	9,960	97,173	32,155	27,125	105,639	2,465	--	
Georgetown	383,681	--	--	19,074	157,069	48,049	4,338	155,151	--	--	
Horry	453,646	--	--	15,772	180,678	59,395	13,212	182,387	2,202	--	
Kershaw	345,740	--	--	53,517	110,015	57,664	73,803	36,904	13,837	--	
Lee	119,706	--	--	2,747	51,069	13,689	19,227	32,974	--	--	
Marion	205,622	--	--	4,821	60,131	19,381	29,025	68,158	24,106	--	
Marlboro	171,337	--	--	14,196	40,198	10,158	21,157	78,142	7,486	--	
Richland	304,971	--	--	34,475	86,471	47,312	77,541	32,992	26,180	--	
Sumter	231,958	--	--	19,335	66,214	26,151	28,452	83,192	8,614	--	
Williamsburg	389,201	--	--	14,128	129,744	58,164	33,205	144,305	9,655	--	
Total	4,574,875	--	--	355,119	1,546,044	610,473	586,451	1,355,080	121,708	--	

Table 4.--Area of timberland, by county and stand-size class, Northern Coastal Plain of South Carolina, 1986

County	All stands	Stand-size class			Nonstocked areas
		Sawtimber	Poletimber	Sapling- seedling	
<hr/>					
		<hr/>			
		Acres			
		<hr/>			
Berkeley	548,679	264,663	127,948	143,573	12,495
Charleston	275,401	169,170	37,662	66,637	1,932
Chesterfield	341,962	138,929	97,548	80,021	25,464
Clarendon	205,157	109,757	19,016	73,167	3,217
Darlington	179,228	74,806	34,804	59,064	10,554
Dillon	144,069	77,139	32,739	31,224	2,967
Florence	274,517	147,375	59,472	62,738	4,932
Georgetown	383,681	164,543	85,887	125,409	7,842
Horry	453,646	247,361	89,390	109,932	6,963
Kershaw	345,740	108,392	118,627	104,880	13,841
Lee	119,706	63,040	20,944	32,975	2,747
Marion	205,622	121,579	29,684	49,537	4,822
Marlboro	171,337	79,190	67,128	21,504	3,515
Richland	304,971	129,150	79,610	96,211	--
Sumter	231,958	116,307	45,787	65,556	4,308
Williamsburg	389,201	196,348	96,779	86,184	9,890
<hr/>					
Total	4,574,875	2,207,749	1,043,025	1,208,612	115,489

Table 5.--Area of timberland, by county and site class, Northern Coastal Plain of South Carolina, 1986

County	All classes	Site class (cubic feet per acre per year)				
		>164	120-164	85-119	50-84	20-49
----- Acres -----						
Berkeley	548,679	--	35,311	221,431	262,156	29,781
Charleston	275,401	2,297	20,600	114,998	104,001	33,505
Chesterfield	341,962	--	8,980	54,281	141,047	137,654
Clarendon	205,157	--	9,735	73,651	101,086	20,685
Darlington	179,228	--	5,466	52,613	101,921	19,228
Dillon	144,069	--	--	44,833	70,395	28,841
Florence	274,517	--	9,864	63,130	188,999	12,524
Georgetown	383,681	--	--	75,737	266,730	41,214
Horry	453,646	2,202	6,963	94,626	263,436	86,419
Kershaw	345,740	2,306	4,614	43,818	203,960	91,042
Lee	119,706	--	--	23,537	74,240	21,929
Marion	205,622	--	4,821	71,092	115,722	13,987
Marlboro	171,337	--	9,627	56,734	79,030	25,946
Richland	304,971	--	2,161	54,976	194,857	52,977
Sumter	231,958	--	9,373	85,293	113,448	23,844
Williamsburg	389,201	--	9,890	96,502	241,601	41,208
Total	4,574,875	6,805	137,405	1,227,252	2,522,629	680,784

Table 6.--Area of timberland, by county and stocking class of growing-stock trees, Northern Coastal Plain of South Carolina, 1986

County	All classes	Stocking class (percent) ^a				
		>130	100-130	60-99	16.7-59	<16.7
----- Acres -----						
Berkeley	548,679	40,242	246,660	190,640	58,642	12,495
Charleston	275,401	23,917	102,722	113,467	33,363	1,932
Chesterfield	341,962	20,889	74,349	149,644	71,616	25,464
Clarendon	205,157	13,689	66,563	97,723	23,965	3,217
Darlington	179,228	4,988	44,980	80,792	37,914	10,554
Dillon	144,069	8,263	44,228	75,527	13,084	2,967
Florence	274,517	14,893	88,783	132,564	33,345	4,932
Georgetown	383,681	18,015	182,362	134,363	41,099	7,842
Horry	453,646	30,410	170,435	197,451	48,387	6,963
Kershaw	345,740	10,867	76,098	159,605	85,329	13,841
Lee	119,706	10,987	29,155	63,172	13,645	2,747
Marion	205,622	12,384	69,585	79,503	39,328	4,822
Marlboro	171,337	7,774	68,030	66,341	25,677	3,515
Richland	304,971	4,448	115,242	128,550	56,731	--
Sumter	231,958	19,642	79,542	106,729	21,737	4,308
Williamsburg	389,201	7,065	156,119	175,154	40,973	9,890
Total	4,574,875	248,473	1,614,853	1,951,225	644,835	115,489

^aSee stocking standards on page 12.

Table 7.--Volume of growing stock and sawtimber on timberland, by county and species group, Northern Coastal Plain of South Carolina, 1986

County	Growing stock					Sawtimber				
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
	-- -- -- -- -- Thousand cubic feet ^a -- -- -- -- --					-- -- -- -- -- Thousand board feet -- -- -- -- --				
Berkeley	870,078	505,217	36,985	181,911	145,965	3,206,105	2,046,496	140,833	462,906	555,870
Charleston	506,039	276,867	28,244	117,743	83,185	2,022,362	1,324,696	117,134	335,999	244,533
Chesterfield	391,990	206,503	209	121,821	63,457	1,300,653	737,529	--	391,602	171,522
Clarendon	368,865	112,963	25,472	144,543	85,887	1,376,870	555,912	89,320	419,251	312,387
Darlington	211,843	86,587	16,172	57,457	51,627	834,606	420,109	83,534	206,243	124,720
Dillon	251,106	86,936	9,572	108,932	45,666	886,877	385,489	48,934	316,970	135,484
Florence	486,066	217,175	25,017	146,947	96,927	1,915,075	971,053	110,633	491,640	341,749
Georgetown	526,885	260,708	24,604	159,385	82,188	1,868,047	1,004,129	97,460	482,932	283,526
Horry	827,242	337,270	51,647	336,352	101,973	3,073,601	1,466,982	217,963	1,012,452	376,204
Kershaw	325,251	183,339	2,609	86,018	53,285	986,451	590,185	9,490	274,551	112,225
Lee	178,669	85,056	613	67,213	25,787	617,334	326,943	2,843	213,906	73,642
Marion	436,540	116,349	42,124	205,606	72,461	1,649,515	522,562	216,099	646,383	264,471
Marlboro	278,705	86,430	6,450	137,709	48,116	804,364	252,801	31,278	361,949	158,336
Richland	369,957	155,638	5,742	110,793	97,784	1,281,762	594,678	19,353	353,054	314,677
Sumter	386,669	134,449	11,900	170,066	70,254	1,422,265	539,179	50,123	606,010	226,953
Williamsburg	612,559	254,522	16,818	179,350	161,869	2,215,950	1,069,853	81,130	489,585	575,382
Total	7,028,464	3,106,009	304,178	2,331,846	1,286,431	25,461,837	12,808,596	1,316,127	7,065,433	4,271,681

^aFactors for converting to cords are shown on page 12.

Table 8.--Net annual growth of growing stock and sawtimber on timberland, by county and species group, Northern Coastal Plain of South Carolina, 1985

County	Growing stock					Sawtimber				
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
Berkeley	38,470	28,643	847	4,891	4,089	155,943	116,156	3,999	17,317	18,471
Charleston	17,895	11,570	591	2,868	2,866	86,090	61,602	3,361	9,352	11,775
Chesterfield	19,463	13,745	6	3,499	2,213	63,750	44,086	--	12,565	7,099
Clarendon	11,945	5,052	741	3,651	2,501	55,324	25,442	2,987	15,472	11,472
Darlington	8,385	3,769	561	1,594	2,461	30,837	18,813	2,237	4,738	5,049
Dillon	9,103	4,574	217	2,662	1,650	36,694	20,885	1,327	9,270	5,212
Florence	17,409	10,465	599	3,501	2,844	80,349	53,589	3,143	13,085	10,532
Georgetown	21,084	14,330	628	3,632	2,494	88,730	64,032	3,468	12,609	8,621
Horry	28,259	16,398	1,415	7,610	2,836	131,441	83,366	6,772	29,173	12,130
Kershaw	18,099	13,393	74	2,642	1,990	63,808	47,948	247	9,160	6,453
Lee	7,406	4,786	8	1,634	978	31,697	23,633	47	5,925	2,092
Marion	14,495	6,202	985	5,277	2,031	62,128	27,919	5,852	17,870	10,487
Marlboro	11,549	6,218	173	3,749	1,409	48,509	27,018	905	13,605	6,981
Richland	16,056	10,028	166	2,966	2,896	65,190	39,595	653	11,690	13,252
Sumter	13,238	7,193	297	3,699	2,049	56,780	29,748	1,505	18,668	6,859
Williamsburg	22,985	13,445	357	4,585	4,598	98,022	60,410	2,304	14,323	20,985
Total	275,841	169,811	7,665	58,460	39,905	1,155,292	744,242	38,807	214,773	157,470

-----Thousand cubic feet-----Thousand board feet-----

Table 9.--Annual removals of growing stock and sawtimber on timberland, by county and species group, Northern Coastal Plain of South Carolina, 1985

County	Growing stock					Sawtimber				
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
	-- -- -- -- -- Thousand cubic feet					-- -- -- -- -- Thousand board feet				
Berkeley	41,835	32,864	191	3,522	5,258	177,920	139,161	1,116	13,490	24,153
Charleston	21,553	18,583	280	1,065	1,625	94,258	85,650	1,124	2,191	5,293
Chesterfield	4,521	3,022	--	556	943	13,759	10,080	--	1,318	2,361
Clarendon	14,143	5,052	784	5,315	2,992	52,326	17,999	3,174	17,174	13,979
Darlington	11,349	5,739	--	4,276	1,334	44,395	23,449	--	16,585	4,361
Dillon	5,744	2,279	--	3,247	218	23,086	8,549	--	14,537	--
Florence	17,810	13,206	915	2,639	1,050	70,106	59,367	4,257	6,293	189
Georgetown	23,867	17,393	158	4,074	2,242	88,684	70,868	399	8,758	8,659
Horry	17,317	10,120	332	3,367	3,498	62,957	36,526	966	13,041	12,424
Kershaw	15,542	10,911	--	2,101	2,530	53,619	39,758	--	8,181	5,680
Lee	3,482	1,489	--	1,235	758	8,947	1,883	--	4,913	2,151
Marion	13,041	4,782	817	5,333	2,109	59,892	22,695	4,223	23,156	9,818
Marlboro	2,760	1,634	106	544	476	10,762	6,721	568	2,438	1,035
Richland	15,723	11,507	73	2,677	1,466	57,195	42,365	278	10,323	4,229
Sumter	7,269	5,311	--	1,545	413	30,794	25,367	--	4,819	608
Williamsburg	17,965	12,598	172	2,542	2,653	62,870	47,934	839	5,817	8,280
Total	233,921	156,490	3,828	44,038	29,565	911,570	638,372	16,944	153,034	103,220

Unit Tables

Table 10.--Area of timberland, by forest type and ownership class, Northern Coastal Plain of South Carolina, 1986

Forest type	All ownerships	Ownership class				
		National Forest	Other public	Forest industry	Forest industry- leased	Other private
----- Acres -----						
Softwood types						
White pine-hemlock	--	--	--	--	--	--
Spruce-fir	--	--	--	--	--	--
Longleaf pine	207,332	20,170	73,293	16,318	--	97,551
Slash pine	147,787	--	38,888	50,621	1,349	56,929
Loblolly pine	1,373,711	97,675	51,710	513,623	21,067	689,636
Shortleaf pine	16,113	--	2,103	--	--	14,010
Virginia pine	--	--	--	--	--	--
Sand pine	--	--	--	--	--	--
Eastern redcedar	1,058	--	1,058	--	--	--
Pond pine	155,162	10,085	13,883	41,082	--	90,112
Spruce pine	--	--	--	--	--	--
Pitch pine	--	--	--	--	--	--
Table Mountain pine	--	--	--	--	--	--
Total	1,901,163	127,930	180,935	621,644	22,416	948,238
Hardwood types						
Oak-pine	610,473	37,992	22,158	115,962	5,537	428,824
Oak-hickory	516,387	2,486	18,389	58,886	4,435	432,191
Chestnut oak	--	--	--	--	--	--
Southern scrub oak	70,064	--	8,032	4,518	--	57,514
Oak-gum-cypress	1,355,080	62,861	19,858	385,974	2,988	883,399
Elm-ash-cottonwood	121,708	--	4,206	37,569	5,537	74,396
Maple-beech-birch	--	--	--	--	--	--
Total	2,673,712	103,339	72,643	602,909	18,497	1,876,324
All types	4,574,875	231,269	253,578	1,224,553	40,913	2,824,562

Table 11.--Area of timberland, by ownership and stocking classes of growing-stock trees, Northern Coastal Plain of South Carolina, 1986

Ownership class	All classes	Stocking class (percent) ^a				
		>130	100-130	60-99	16.7-59	<16.7
	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
				Acres		
National Forest	231,269	25,420	110,522	85,380	9,947	--
Other public	253,578	10,879	74,238	105,202	57,438	5,821
Forest industry	1,224,553	66,235	535,192	429,449	153,843	39,834
Forest industry-leased	40,913	11,952	13,232	11,294	2,768	1,667
Other private	2,824,562	133,987	881,669	1,319,900	420,839	68,167
All ownerships	4,574,875	248,473	1,614,853	1,951,225	644,835	115,489

^aSee stocking standards on page 12.

Table 12.--Area of timberland, by forest type and stand-size class,
Northern Coastal Plain of South Carolina, 1986

Forest type	All stands	Stand-size class			Nonstocked areas
		Sawtimber	Poletimber	Sapling- seedling	
----- Acres -----					
Softwood types					
White pine-hemlock	--	--	--	--	--
Spruce-fir	--	--	--	--	--
Longleaf pine	207,332	140,058	28,736	31,459	7,079
Slash pine	147,787	40,994	80,591	26,202	--
Loblolly pine	1,373,711	638,228	302,339	427,903	5,241
Shortleaf pine	16,113	4,405	4,409	7,299	--
Virginia pine	--	--	--	--	--
Sand pine	--	--	--	--	--
Eastern redcedar	1,058	--	--	1,058	--
Pond pine	155,162	87,093	32,761	35,308	--
Spruce pine	--	--	--	--	--
Pitch pine	--	--	--	--	--
Table Mountain pine	--	--	--	--	--
Total	1,901,163	910,778	448,836	529,229	12,320
Hardwood types					
Oak-pine	610,473	260,163	132,218	212,789	5,303
Oak-hickory	516,387	189,283	135,762	175,539	15,803
Chestnut oak	--	--	--	--	--
Southern scrub oak	70,064	2,733	11,508	11,995	43,828
Oak-gum-cypress	1,355,080	767,695	299,408	254,486	33,491
Elm-ash-cottonwood	121,708	77,097	15,293	24,574	4,744
Maple-beech-birch	--	--	--	--	--
Total	2,673,712	1,296,971	594,189	679,383	103,169
All types	4,574,875	2,207,749	1,043,025	1,208,612	115,489

Table 13.--Area of timberland, by stand-age and broad management classes, all ownerships, Northern Coastal Plain of South Carolina, 1986

Stand-age class (years)	All classes	Broad management class				
		Pine plantation	Natural pine	Oak-pine	Upland hardwood	Lowland hardwood
<div>- - - - - Acres - - - - -</div>						
0-10	773,452	251,664	136,501	140,604	96,834	147,849
11-20	463,659	179,091	128,906	59,509	31,938	64,215
21-30	454,719	169,464	144,592	33,590	25,810	81,263
31-40	461,925	34,598	209,509	53,606	69,923	94,289
41-50	544,365	3,123	246,725	69,612	71,072	153,833
51-60	432,341	--	147,070	47,599	42,613	195,059
61-70	246,355	--	57,611	24,167	18,223	146,354
71-80	143,198	--	30,280	7,155	11,801	93,962
81+	237,866	--	16,450	16,230	11,454	193,732
No manageable stand	816,995	15,674	129,905	158,401	206,783	306,232
All classes	4,574,875	653,614	1,247,549	610,473	586,451	1,476,788

Table 14.--Area of timberland, by stand-age and broad management classes, public ownerships, Northern Coastal Plain of South Carolina, 1986

Stand-age class (years)	All classes	Broad management class				
		Pine plantation	Natural pine	Oak-pine	Upland hardwood	Lowland hardwood
		<u>Acres</u>				
0-10	39,206	2,103	19,476	12,187	2,953	2,487
11-20	40,208	8,988	23,572	6,440	--	1,208
21-30	73,366	46,122	23,781	738	--	2,725
31-40	37,588	7,865	18,860	7,203	--	3,660
41-50	74,782	738	46,224	9,701	2,793	15,326
51-60	65,818	--	41,341	5,112	--	19,365
61-70	32,984	--	23,503	2,487	2,103	4,891
71-80	22,079	--	12,005	2,487	--	7,587
81+	25,560	--	5,112	5,250	--	15,198
No manageable stand	73,256	2,487	26,688	8,545	21,058	14,478
All classes	484,847	68,303	240,562	60,150	28,907	86,925

Table 15.--Area of timberland, by stand-age and broad management classes, forest industry,^a Northern Coastal Plain of South Carolina, 1986

Stand-age class (years)	All classes	Broad management class				
		Pine plantation	Natural pine	Oak-pine	Upland hardwood	Lowland hardwood
----- Acres -----						
0-10	291,232	175,647	23,775	33,989	12,210	45,611
11-20	216,273	149,623	24,140	17,640	3,865	21,005
21-30	131,003	74,728	40,182	2,590	--	13,503
31-40	82,052	13,513	36,572	14,427	--	17,540
41-50	108,208	2,385	54,900	7,020	12,047	31,856
51-60	85,999	--	14,484	10,187	1,933	59,395
61-70	33,243	--	4,995	2,384	2,499	23,365
71-80	32,688	--	--	--	2,305	30,383
81+	80,134	--	--	--	--	80,134
No manageable stand	204,634	4,310	24,806	33,262	32,980	109,276
All classes	1,265,466	420,206	223,854	121,499	67,839	432,068

^aIncludes 40,913 acres of other private land under long-term lease.

Table 16.--Area of timberland, by stand-age and broad management classes, other private ownerships,^a Northern Coastal Plain of South Carolina, 1986

Stand-age class (years)	All classes	Broad management class				
		Pine plantation	Natural pine	Oak-pine	Upland hardwood	Lowland hardwood
----- Acres -----						
0-10	443,014	73,914	93,250	94,428	81,671	99,751
11-20	207,178	20,480	81,194	35,429	28,073	42,002
21-30	250,350	48,614	80,629	30,262	25,810	65,035
31-40	342,285	13,220	154,077	31,976	69,923	73,089
41-50	361,375	--	145,601	52,891	56,232	106,651
51-60	280,524	--	91,245	32,300	40,680	116,299
61-70	180,128	--	29,113	19,296	13,621	118,098
71-80	88,431	--	18,275	4,668	9,496	55,992
81+	132,172	--	11,338	10,980	11,454	98,400
No manageable stand	539,105	8,877	78,411	116,594	152,745	182,478
All classes	2,824,562	165,105	783,133	428,824	489,705	957,795

^aExcludes 40,913 acres of other private land under long-term lease to forest industry.

Table 17.--Area of timberland, by broad management and stand-volume classes,
Northern Coastal Plain of South Carolina, 1986

Broad management class	All classes	Stand-volume class (cubic feet of growing stock per acre)				
		0-499	500-999	1000-1499	1500-1999	2000+
		----- Acres -----				
Pine plantation	653,614	320,291	108,818	110,136	50,833	63,536
Natural pine	1,247,549	249,557	135,687	203,772	199,818	458,715
Oak-pine	610,473	219,415	150,855	64,105	41,883	134,215
Upland hardwood	586,451	252,859	82,208	92,794	69,375	89,215
Lowland hardwood	1,476,788	295,892	188,977	151,940	176,337	663,642
All classes	4,574,875	1,338,014	666,545	622,747	538,246	1,409,323

Table 18.--Volume of growing stock on timberland, by broad management class, species group, and stand-age class, Northern Coastal Plain of South Carolina, 1986

Broad management class and species group	All classes	No manageable stand	Stand-age class (years)								
			0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81+
			----- Thousand cubic feet -----								
Pine plantation											
Softwood	496,246	7,340	8,752	185,158	222,129	61,855	11,012	--	--	--	--
Hardwood	12,929	--	1,560	3,585	4,490	2,824	470	--	--	--	--
Total	509,175	7,340	10,312	188,743	226,619	64,679	11,482	--	--	--	--
Natural pine											
Softwood	1,997,187	52,803	33,353	89,965	211,237	444,415	543,527	358,115	143,038	78,170	42,564
Hardwood	221,480	941	7,057	13,342	15,241	53,899	56,952	45,145	16,106	11,679	1,118
Total	2,218,667	53,744	40,410	103,307	226,478	498,314	600,479	403,260	159,144	89,849	43,682
Oak-pine											
Softwood	403,015	58,449	25,641	22,255	19,629	54,320	81,103	63,375	35,831	13,463	28,949
Hardwood	288,865	22,918	22,258	8,499	13,087	35,099	65,907	45,253	35,297	16,799	23,748
Total	691,880	81,367	47,899	30,754	32,716	89,419	147,010	108,628	71,128	30,262	52,697
Upland hardwood											
Softwood	78,408	13,562	3,426	4,186	2,561	15,464	16,721	9,827	3,798	2,784	6,079
Hardwood	497,245	59,210	22,261	11,789	23,231	90,347	109,479	82,157	44,334	25,101	29,336
Total	575,653	72,772	25,687	15,975	25,792	105,811	126,200	91,984	48,132	27,885	35,415
Lowland hardwood											
Softwood	435,331	24,479	7,425	5,312	18,577	16,773	57,597	76,504	42,441	45,181	141,042
Hardwood	2,597,758	172,631	42,022	35,356	98,148	148,548	330,005	471,211	409,846	273,596	616,395
Total	3,033,089	197,110	49,447	40,668	116,725	165,321	387,602	547,715	452,287	318,777	757,437
All types											
Softwood	3,410,187	156,633	78,597	306,876	474,133	592,827	709,960	507,821	225,108	139,598	218,634
Hardwood	3,618,277	255,700	95,158	72,571	154,197	330,717	562,813	643,766	505,583	327,175	670,597
Total	7,028,464	412,333	173,755	379,447	628,330	923,544	1,272,773	1,151,587	730,691	466,773	889,231

Table 19.--Net annual growth of growing stock on timberland, by broad management class, species group, and stand-age class, Northern Coastal Plain of South Carolina, 1985

Broad management class ^a and species group	All classes	No manageable stand	Stand-age class ^a (years)								
			0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81+
			----- Thousand cubic feet -----								
Pine plantation											
Softwood	46,324	581	3,595	19,502	18,121	3,969	556	--	--	--	--
Hardwood	732	--	72	174	328	139	19	--	--	--	--
Total	47,056	581	3,667	19,676	18,449	4,108	575	--	--	--	--
Natural pine											
Softwood	97,671	2,553	1,654	9,170	17,205	23,273	22,887	13,908	4,072	2,007	942
Hardwood	9,328	85	239	713	854	2,251	2,521	1,864	408	359	34
Total	106,999	2,638	1,893	9,883	18,059	25,524	25,408	15,772	4,480	2,366	976
Oak-pine											
Softwood	17,850	3,221	1,422	2,314	1,471	2,289	3,094	1,978	945	242	874
Hardwood	9,824	995	711	457	886	1,519	2,120	1,259	949	393	535
Total	27,674	4,216	2,133	2,771	2,357	3,808	5,214	3,237	1,894	635	1,409
Upland hardwood											
Softwood	3,353	707	239	275	122	771	583	345	119	68	124
Hardwood	16,068	2,060	914	434	1,042	3,380	3,637	2,378	1,033	593	597
Total	19,421	2,767	1,153	709	1,164	4,151	4,220	2,723	1,152	661	721
Lowland hardwood											
Softwood	12,278	804	283	244	651	646	2,031	2,090	1,050	1,160	3,319
Hardwood	62,413	5,422	1,441	1,403	3,980	5,239	8,560	11,392	8,852	5,545	10,579
Total	74,691	6,226	1,724	1,647	4,631	5,885	10,591	13,482	9,902	6,705	13,898
All types											
Softwood	177,476	7,866	7,193	31,505	37,570	30,948	29,151	18,321	6,186	3,477	5,259
Hardwood	98,365	8,562	3,377	3,181	7,090	12,528	16,857	16,893	11,242	6,890	11,745
Total	275,841	16,428	10,570	34,686	44,660	43,476	46,008	35,214	17,428	10,367	17,004

^aClassifications at the end of the remeasurement period.

Table 20.--Annual removals of growing stock on timberland, by broad management class, species group, and stand-age class, Northern Coastal Plain of South Carolina, 1985

Broad management class ^a and species group	All classes	No manageable stand	Stand-age class ^a (years)								
			0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81+
			----- Thousand cubic feet -----								
Pine plantation											
Softwood	10,090	415	231	5,141	3,594	709	--	--	--	--	--
Hardwood	--	--	--	--	--	--	--	--	--	--	--
Total	10,090	415	231	5,141	3,594	709	--	--	--	--	--
Natural pine											
Softwood	122,810	4,930	1,158	6,861	28,962	40,558	22,683	11,359	3,292	586	2,421
Hardwood	7,792	298	45	383	1,254	1,891	1,467	989	723	685	57
Total	130,602	5,228	1,203	7,244	30,216	42,449	24,150	12,348	4,015	1,271	2,478
Oak-pine											
Softwood	17,839	3,069	930	243	2,564	5,519	1,746	1,812	1,812	144	--
Hardwood	5,695	738	585	--	360	1,445	1,841	494	150	82	--
Total	23,534	3,807	1,515	243	2,924	6,964	3,587	2,306	1,962	226	--
Upland hardwood											
Softwood	2,281	681	134	130	111	181	204	560	115	165	--
Hardwood	14,993	2,339	240	436	496	1,130	4,224	2,230	749	1,629	1,520
Total	17,274	3,020	374	566	607	1,311	4,428	2,790	864	1,794	1,520
Lowland hardwood											
Softwood	7,298	391	366	352	571	324	1,279	587	637	1,028	1,763
Hardwood	45,123	2,084	390	349	590	3,757	6,004	11,746	8,990	3,362	7,851
Total	52,421	2,475	756	701	1,161	4,081	7,283	12,333	9,627	4,390	9,614
All types											
Softwood	160,318	9,486	2,819	12,727	35,802	47,291	25,912	14,318	5,856	1,923	4,184
Hardwood	73,603	5,459	1,260	1,168	2,700	8,223	13,536	15,459	10,612	5,758	9,428
Total	233,921	14,945	4,079	13,895	38,502	55,514	39,448	29,777	16,468	7,681	13,612

^aClassifications before timber removals.

Table 21.--Merchantable volume of live trees and growing stock on timberland, by forest-type and species groups, Northern Coastal Plain of South Carolina, 1986

Forest-type group	Live trees					Growing stock				
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
	----- Thousand cubic feet -----									
White pine-hemlock	--	--	--	--	--	--	--	--	--	--
Spruce-fir	--	--	--	--	--	--	--	--	--	--
Longleaf-slash pine	467,303	452,815	--	4,869	9,619	462,256	451,737	--	3,940	6,579
Loblolly-shortleaf pine	2,320,276	2,053,543	7,550	132,611	126,572	2,265,586	2,035,888	5,808	118,859	105,031
Oak-pine	745,147	387,986	18,461	156,751	181,949	691,880	384,726	18,289	132,734	156,131
Oak-hickory	657,371	76,192	2,703	235,718	342,758	575,653	75,705	2,703	209,940	287,305
Oak-gum-cypress	3,201,353	157,673	277,172	2,021,585	744,923	2,794,733	156,930	267,971	1,727,792	642,040
Elm-ash-cottonwood	277,998	1,023	9,407	161,643	105,925	238,356	1,023	9,407	138,581	89,345
Maple-beech-birch	--	--	--	--	--	--	--	--	--	--
All types	7,669,448	3,129,232	315,293	2,713,177	1,511,746	7,028,464	3,106,009	304,178	2,331,846	1,286,431

Table 22.--Area of timberland treated or disturbed annually and retained in timberland, by treatment or disturbance and ownership class, Northern Coastal Plain of South Carolina, 1978 to 1986

Treatment or disturbance	All ownerships	Ownership class			
		Public	Forest industry	Forest industry- leased	Other private
		Acres ^a			
Final harvest	96,234	4,976	29,708	1,549	60,001
Partial harvest ^b	20,841	3,122	4,273	--	13,446
Commercial thinning	16,320	2,419	5,790	--	8,111
Other stand improvement	4,451	1,152	529	--	2,770
Site preparation	43,141	1,227	26,935	2,205	12,774
Artificial regeneration ^c	33,925	500	22,267	1,670	9,488
Natural regeneration ^c	59,341	4,353	9,729	338	44,921
Other treatment	7,765	12	1,142	--	6,611
Natural disturbance	35,998	2,460	10,860	837	21,841

^a Since some acres experience more than one treatment or disturbance, there are no column totals.

^b Includes high grading and some selective cutting.

^c Includes establishment of trees for timber production on forest and nonforest land.

Table 23.--Area of timberland treated or disturbed annually and retained in timberland, by treatment or disturbance and broad management class, Northern Coastal Plain of South Carolina, 1978 to 1986

Treatment or disturbance	All classes	Broad management class ^a				
		Pine plantation	Natural pine	Oak- pine	Upland hardwood	Lowland hardwood
		Acres ^b				
Final harvest	96,234	5,144	45,651	17,100	10,526	17,813
Partial harvest ^c	20,841	254	8,873	2,551	2,241	6,922
Commercial thinning	16,320	5,787	9,732	532	--	269
Other stand improvement	4,451	579	1,365	1,688	291	528
Site preparation	43,141	4,302	19,316	4,755	9,684	5,084
Other treatment	7,765	1,151	1,096	1,102	3,844	572
Natural disturbance	35,998	6,952	8,431	4,915	4,083	11,617

^aClassification before treatment or disturbance.

^bSince some acres experience more than one treatment or disturbance, there are no column totals.

^cIncludes high grading and some selective cutting.

Table 24.--Area of timberland regenerated annually, by type of regeneration and broad management class, Northern Coastal Plain of South Carolina, 1978 to 1986

Type of regeneration	All classes	Broad management class ^a				
		Pine plantation	Natural pine	Oak- pine	Upland hardwood	Lowland hardwood
		<u>Acres</u>				
Artificial regeneration following harvest	19,636	16,620	--	2,109	907	--
Natural regeneration following harvest	42,385	--	9,917	9,696	8,685	14,087
Other artificial regen- eration on forest land	11,777	10,348	--	1,429	--	--
Other natural regen- eration on forest land	11,750	--	4,415	2,987	1,407	2,941
Artificial regeneration on nonforest land	2,512	2,512	--	--	--	--
Natural reversion of nonforest land	5,206	--	3,946	505	500	255
Total	93,266	29,480	18,278	16,726	11,499	17,283

^aClassification after regeneration.

Table 25.--Area of timberland, by treatment opportunity and broad management classes, Northern Coastal Plain of South Carolina, 1986

Treatment opportunity class	All classes	Broad management class				
		Pine plantation	Natural pine	Oak- pine	Upland hardwood	Lowland hardwood
----- Acres -----						
Salvage	10,372	5,867	4,505	--	--	--
Harvest	278,472	--	56,515	31,089	18,285	172,583
Commercial thinning	99,357	55,064	37,712	2,297	--	4,284
Other stand improvement	332,028	16,780	69,902	82,588	58,708	104,050
Stand conversion	122,107	5,762	9,100	22,085	43,217	41,943
Regeneration	783,385	15,674	129,905	158,401	206,783	272,622
Stands in relatively good condition	2,711,780	554,467	935,635	311,629	257,297	652,752
Adverse sites ^a	237,374	--	4,275	2,384	2,161	228,554
All classes	4,574,875	653,614	1,247,549	610,473	586,451	1,476,788

^a Areas where management opportunities are severely limited because of steep slopes or poor drainage.

Table 26.--Area of timberland, by treatment opportunity and ownership classes, Northern Coastal Plain of South Carolina, 1986

Treatment opportunity class	All ownerships	Ownership class			
		Public	Forest industry	Forest industry-leased	Other private
----- Acres -----					
Salvage	10,372	50	6,822	1,349	2,151
Harvest	278,472	42,825	54,441	--	181,206
Commercial thinning	99,357	7,955	42,309	6,651	42,442
Other stand improvement	332,028	25,991	61,033	--	245,004
Stand conversion	122,107	5,762	22,362	5,537	88,446
Regeneration	783,385	66,593	187,058	7,203	522,531
Stands in relatively good condition	2,711,780	309,258	773,673	20,173	1,608,676
Adverse sites ^a	237,374	26,413	76,855	--	134,106
All classes	4,574,875	484,847	1,224,553	40,913	2,824,562

^a Areas where management opportunities are severely limited because of steep slopes or poor drainage.

Table 27.--Merchantable volume of live trees and growing stock on timberland, by ownership class and species group, Northern Coastal Plain of South Carolina, 1986

Ownership class	Live trees					Growing stock				
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
	----- Thousand cubic feet -----									
National Forest	493,909	275,005	43,593	112,849	62,462	477,750	273,968	43,593	103,843	56,346
Other public	353,292	251,537	12,616	45,839	43,300	332,666	250,111	12,251	41,123	29,181
Forest industry	1,777,893	676,777	113,892	677,415	309,809	1,608,233	669,553	112,494	568,292	257,894
Forest industry-leased	26,783	17,792	--	5,334	3,657	23,475	17,792	--	4,631	1,052
Other private	5,017,571	1,908,121	145,192	1,871,740	1,092,518	4,586,340	1,894,585	135,840	1,613,957	941,958
All ownerships	7,669,448	3,129,232	315,293	2,713,177	1,511,746	7,028,464	3,106,009	304,178	2,331,846	1,286,431

Table 28.--Volume of sawtimber on timberland, by ownership class and species group, Northern Coastal Plain of South Carolina, 1986

Ownership class	Small sawtimber ^a					Large sawtimber ^b				
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
	----- Thousand board feet -----									
National Forest	711,596	447,255	55,914	149,214	59,213	1,239,757	846,037	123,241	123,925	146,554
Other public	673,394	568,141	17,619	66,275	21,359	470,069	384,135	13,904	37,637	34,393
Forest industry	2,257,575	1,403,798	104,850	557,148	191,779	3,137,883	699,469	422,333	1,232,060	784,021
Forest industry-leased	29,112	15,420	--	10,053	3,639	4,710	--	--	4,710	--
Other private	6,479,086	3,771,229	149,968	1,683,561	874,328	10,458,655	4,673,112	428,298	3,200,850	2,156,395
All ownerships	10,150,763	6,205,843	328,351	2,466,251	1,150,318	15,311,074	6,602,753	987,776	4,599,182	3,121,363

^aVolume of sawtimber trees less than 15.0 inches at d.b.h.^bVolume of sawtimber trees 15.0 inches and larger at d.b.h.

Table 29.--Net annual growth and removals of growing stock on timberland, by ownership class and species group, Northern Coastal Plain of South Carolina, 1985

Ownership class	Net annual growth					Annual timber removals				
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
	----- Thousand cubic feet -----									
National Forest	17,327	12,374	895	2,526	1,532	12,625	12,140	--	132	353
Other public	17,868	14,656	600	1,165	1,447	6,973	6,120	62	375	416
Forest industry	70,448	47,410	2,776	13,122	7,140	70,208	48,307	1,876	12,493	7,532
Forest industry-leased	2,088	1,795	--	260	33	4,429	829	--	3,084	516
Other private	168,110	93,576	3,394	41,387	29,753	139,686	89,094	1,890	27,954	20,748
All ownerships	275,841	169,811	7,665	58,460	39,905	233,921	156,490	3,828	44,038	29,565

Table 30.--Net annual growth and removals of sawtimber on timberland, by ownership class and species group, Northern Coastal Plain of South Carolina, 1985

Ownership class	Net annual growth					Annual timber removals				
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
	----- Thousand board feet -----									
National Forest	78,561	56,214	4,867	8,402	9,078	60,937	59,590	--	254	1,093
Other public	61,314	53,909	1,211	3,791	2,403	24,759	22,848	--	--	1,911
Forest industry	287,478	189,576	15,364	50,672	31,866	255,464	178,420	9,087	37,851	30,106
Forest industry-leased	6,597	5,318	--	1,166	113	18,015	3,891	--	12,252	1,872
Other private	721,342	439,225	17,365	150,742	114,010	552,395	373,623	7,857	102,677	68,238
All ownerships	1,155,292	744,242	38,807	214,773	157,470	911,570	638,372	16,944	153,034	103,220

Table 31.--Volume of timber on timberland, by class of timber and species group, Northern Coastal Plain of South Carolina, 1986

Class of timber	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
- - - - - Thousand cubic feet - - - - -					
Sawtimber trees					
Saw-log portion	4,614,313	2,279,888	244,074	1,327,343	763,008
Upper-stem portion ^a	567,366	184,578	24,351	239,390	119,047
Total	5,181,679	2,464,466	268,425	1,566,733	882,055
Poletimber trees	1,846,785	641,543	35,753	765,113	404,376
All growing-stock trees	7,028,464	3,106,009	304,178	2,331,846	1,286,431
Rough trees					
Sawtimber size	251,796	11,678	2,813	161,355	75,950
Poletimber size	277,145	11,165	1,198	145,839	118,943
Total	528,941	22,843	4,011	307,194	194,893
Rotten trees					
Sawtimber size	104,865	380	7,104	69,053	28,328
Poletimber size	7,178	--	--	5,084	2,094
Total	112,043	380	7,104	74,137	30,422
Salvable dead trees					
Sawtimber size	8,453	3,094	146	3,069	2,144
Poletimber size	5,739	2,952	138	1,619	1,030
Total	14,192	6,046	284	4,688	3,174
Total, all timber	7,683,640	3,135,278	315,577	2,717,865	1,514,920

^aIncludes cull sections in the saw-log portion.

Table 32.--Number of live trees on timberland, by species and diameter class, Northern Coastal Plain of South Carolina, 1986

Species	All classes											Diameter class (inches at breast height)
	1.0-	2.9	3.0-	4.9	5.0-	6.9	7.0-	8.9	9.0-	10.9	12.9	
Softwood												
Longleaf pine	50,282	11,800	10,138	9,070	5,299	5,092	4,194	2,539	1,389	595	27	3
Slash pine	47,983	6,774	14,533	12,890	8,980	3,056	1,063	427	166	53	41	26
Shortleaf pine	14,624	5,625	3,891	1,858	1,263	856	752	221	64	53	15	1
Loblolly pine	476,806	184,283	110,119	71,006	43,000	25,389	16,565	11,054	6,694	4,331	2,290	72
Pond pine	48,618	15,812	9,312	8,467	5,483	4,065	2,545	1,383	903	466	140	42
Virginia pine	--	--	--	--	--	--	--	--	--	--	--	--
Pitch pine	--	--	--	--	--	--	--	--	--	--	--	--
Table Mountain pine	--	--	--	--	--	--	--	--	--	--	--	--
Spruce pine	238	--	--	60	28	66	62	9	--	--	13	--
Sand pine	--	--	--	--	--	--	--	--	--	--	--	--
Eastern white pine	--	--	--	--	--	--	--	--	--	--	--	--
Eastern hemlock	--	--	--	--	--	--	--	--	--	--	--	--
Spruce and fir	--	--	--	--	--	--	--	--	--	--	--	--
Baldcypress	20,933	5,912	3,821	2,929	1,998	1,649	1,207	781	847	515	466	116
Pondcypress	13,042	5,457	2,595	1,489	1,260	1,011	454	300	213	94	69	99
Cedars	9,974	5,851	3,094	501	334	120	--	18	26	11	8	11
Total softwoods												
	682,500	241,514	157,503	108,210	67,677	41,266	26,780	16,789	10,364	6,127	3,165	2,913
Hardwood												
Select white oaks	32,450	16,176	5,728	2,791	2,586	1,820	1,405	693	481	329	191	218
Select red oaks	8,973	4,771	954	1,167	276	477	244	111	184	112	149	35
Chestnut oak	--	--	--	--	--	--	--	--	--	--	--	--
Other white oaks	49,621	30,738	7,965	4,525	2,459	1,275	954	652	344	192	105	306
Other red oaks	357,584	223,030	64,627	30,707	16,500	8,578	5,461	2,837	1,999	1,382	797	1,410
Hickory	48,485	31,593	7,922	3,034	2,677	1,249	715	521	285	167	90	193
Yellow birch	--	--	--	--	--	--	--	--	--	--	--	--
Hard maple	1,787	1,368	136	177	106	--	--	--	--	--	--	--
Soft maple	372,584	266,103	59,139	23,959	10,480	5,033	3,226	2,058	1,219	668	319	334
Beech	2,384	1,941	139	--	146	29	23	--	67	10	8	18
Sweetgum	428,860	273,204	78,707	34,884	18,020	9,602	6,216	3,903	2,022	921	656	649
Tupelo and blackgum	347,819	204,132	61,156	26,364	17,572	12,221	8,500	7,409	3,932	2,885	1,758	1,758
Ash	147,612	110,649	22,440	6,364	3,086	1,968	844	462	175	136	151	312
Cottonwood	4,908	2,472	570	807	215	189	244	156	105	83	26	22
Basswood	83	--	--	83	--	--	--	--	--	--	--	--
Yellow-poplar	22,141	9,242	3,307	2,632	1,684	1,593	1,004	981	716	364	292	301
Bay and magnolia	112,938	92,094	14,966	4,110	1,193	255	173	71	54	22	--	--
Black cherry	27,284	20,618	4,106	1,554	605	160	190	33	13	--	--	5
Black walnut	310	--	136	97	35	--	--	--	29	--	13	--
Sycamore	1,386	839	139	187	--	65	25	16	14	22	15	51
Black locust	278	--	--	--	--	--	--	--	--	--	--	--
Elm	34,509	21,698	6,651	2,796	1,261	812	643	296	119	43	53	78
Other eastern hardwoods	513,745	410,246	72,871	18,680	7,240	2,485	1,378	415	185	74	82	11
Total hardwoods	2,515,741	1,721,192	411,659	164,821	86,203	47,846	31,973	21,129	12,157	7,612	4,450	5,709
All species												
	3,198,241	1,962,706	569,162	273,031	153,880	89,112	58,753	37,918	22,521	13,739	7,615	8,622
												1,182

Thousand trees

Table 33.---Number of growing-stock trees on timberland, by species and diameter class, Northern Coastal Plain of South Carolina, 1986

Species	Diameter class (inches at breast height)													All classes	
	1.0- 2.9	3.0- 4.9	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0 and larger			
----- Thousand trees -----															
Softwood															
Longleaf pine	47,915	9,978	9,721	9,070	5,242	4,169	2,539	1,389	595	136	27	3			
Slash pine	46,136	6,192	13,458	12,700	8,980	1,063	427	166	53	41	--	--			
Shortleaf pine	13,534	5,056	3,459	1,858	1,214	816	221	64	53	15	26	--			
Loblolly pine	450,327	165,113	106,332	68,792	42,261	25,027	16,498	10,981	4,322	2,281	1,996	72			
Pond pine	43,083	12,801	8,007	7,737	5,200	3,933	1,365	889	466	140	42	--			
Virginia pine	--	--	--	--	--	--	--	--	--	--	--	--			
Pitch pine	--	--	--	--	--	--	--	--	--	--	--	--			
Table Mountain pine	--	--	--	--	--	--	--	--	--	--	--	--			
Spruce pine	238	--	--	--	60	28	66	62	9	--	13	--			
Sand pine	--	--	--	--	--	--	--	--	--	--	--	--			
Eastern white pine	--	--	--	--	--	--	--	--	--	--	--	--			
Eastern hemlock	--	--	--	--	--	--	--	--	--	--	--	--			
Spruce and fir	--	--	--	--	--	--	--	--	--	--	--	--			
Baldcypress	19,064	4,799	3,542	2,721	1,944	1,184	730	820	504	466	653	85			
Pondcypress	11,501	4,171	2,456	1,489	1,195	976	300	213	85	69	93	--			
Cedars	7,542	4,028	2,660	375	334	89	18	13	11	8	6	--			
Total softwoods	639,340	212,138	149,635	104,742	66,430	40,587	26,623	16,647	10,268	6,098	3,156	2,856	160		
Hardwood															
Select white oaks	23,111	7,862	5,211	2,619	2,441	1,714	1,405	676	456	320	191	25			
Select red oaks	6,847	2,916	823	1,167	276	449	405	244	111	174	103	35			
Chestnut oak	--	--	--	--	--	--	--	--	--	--	--	--			
Other white oaks	27,948	13,361	6,405	3,215	2,003	1,071	729	408	292	113	80	80			
Other red oaks	249,313	134,473	52,600	26,755	15,089	7,863	4,776	2,554	1,786	1,311	693	198			
Hickory	29,268	15,552	5,629	2,873	2,368	1,029	632	467	273	158	90	36			
Yellow birch	--	--	--	--	--	--	--	--	--	--	--	--			
Hard maple	335	272	--	--	63	--	--	--	--	--	--	--			
Soft maple	180,462	108,775	38,204	16,779	7,536	3,793	2,408	1,298	867	427	184	173			
Beech	1,437	1,086	139	--	104	29	23	39	10	--	7	--			
Sweetgum	301,742	176,589	57,592	29,034	16,196	8,777	5,748	3,677	1,962	870	615	622			
Tupelo and blackgum	192,293	83,206	42,962	20,467	14,418	9,896	6,931	6,008	3,314	2,462	1,269	1,202			
Ash	60,343	39,234	11,196	4,030	1,920	1,396	1,074	689	374	164	121	131			
Cottonwood	3,421	1,164	570	650	215	189	244	156	92	83	17	22			
Basswood	83	--	--	83	--	--	--	--	--	--	--	--			
Yellow-poplar	18,201	6,944	2,568	2,200	1,590	1,427	933	920	677	364	274	290			
Bay and magnolia	32,207	23,507	5,333	2,288	681	187	126	33	41	11	--	--			
Black cherry	11,160	8,469	1,280	952	303	62	77	17	--	--	--	--			
Black walnut	253	--	136	--	53	35	--	--	29	--	--	--			
Sycamore	1,383	839	139	187	--	65	25	16	14	22	15	51			
Black locust	139	139	--	--	--	--	--	--	--	--	--	--			
Elm	16,356	8,234	3,252	2,507	867	542	522	170	77	103	43	39			
Other eastern hardwoods	19,679	10,707	4,379	1,420	1,404	486	669	258	147	74	75	56			
Total hardwoods	1,175,981	643,329	238,418	117,226	67,527	39,010	26,727	17,591	10,551	6,666	3,770	4,495	671		
All species	1,815,321	855,467	388,053	221,968	133,957	79,597	53,350	34,238	20,819	12,764	6,926	7,351	831		

Table 34.--Merchantable volume of live trees on timberland, by species and diameter class, Northern Coastal Plain of South Carolina, 1986

Species	All classes	Diameter class (inches at breast height)											29.0 and larger
		5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9			
-- Thousand cubic feet --													
Softwood													
Longleaf pine	371,663	24,113	36,763	65,347	83,165	69,720	53,248	28,022	8,099	2,507	679		
Slash pine	154,823	31,591	50,761	31,347	18,623	10,694	6,364	2,590	2,853				
Shortleaf pine	53,055	4,318	7,919	10,955	14,503	6,406	2,404	2,791	1,260	2,499			
Loblolly pine	2,293,879	177,726	263,930	302,655	325,266	323,073	278,795	241,972	159,380	208,529	12,553		
Pond pine	248,188	22,146	33,183	45,266	46,361	36,208	32,445	20,278	8,357	3,944			
Virginia pine	--	--	--	--	--	--	--	--	--	--	--		
Pitch pine	--	--	--	--	--	--	--	--	--	--	--		
Table Mountain pine	--	--	--	--	--	--	--	--	--	--	--		
Spruce pine	7,624	--	258	465	--	2,313	2,767	589	--	1,232	--		
Sand pine	--	--	--	--	--	--	--	--	--	--	--		
Eastern white pine	--	--	--	--	--	--	--	--	--	--	--		
Eastern hemlock	--	--	--	--	--	--	--	--	--	--	--		
Spruce and fir	--	--	--	--	--	--	--	--	--	--	--		
Baldcypress	247,661	8,377	13,293	19,241	21,750	21,071	31,304	25,247	28,361	61,743	17,274		
Pondcypress	60,440	4,641	7,692	11,831	7,416	6,914	6,821	3,505	3,893	7,381	346		
Cedars	7,192	1,152	1,796	1,182	--	415	661	510	453	1,023	--		
Total softwoods	3,444,525	274,064	415,595	488,289	517,084	476,814	414,809	325,504	212,656	288,858	30,852		
Hardwood													
Select white oaks	153,480	7,645	14,951	19,500	24,991	17,545	17,350	15,715	11,677	19,001	5,105		
Select red oaks	67,215	2,952	1,480	5,568	8,940	6,935	4,473	8,598	7,026	14,494	6,749		
Chestnut oak	--	--	--	--	--	--	--	--	--	--	--		
Other white oaks	127,970	10,471	12,572	11,648	14,296	12,810	9,323	7,688	5,757	24,996	18,409		
Other red oaks	786,603	80,344	94,250	91,351	94,835	71,047	70,199	66,774	46,916	125,464	45,423		
Hickory	110,073	6,775	14,377	12,553	11,869	13,150	10,521	8,788	6,165	18,408	7,467		
Yellow birch	--	--	--	--	--	--	--	--	--	--	--		
Hard maple	871	376	495	--	--	--	--	--	--	--	--		
Soft maple	402,697	66,996	60,693	56,535	54,780	47,331	41,093	28,209	16,515	24,258	6,287		
Beech	5,319	--	669	386	405	--	1,801	369	256	1,115	318		
Sweetgum	804,116	87,409	108,188	114,228	122,838	113,424	81,066	49,280	44,221	68,411	15,051		
Tupelo and blackgum	1,140,351	74,864	107,079	134,358	147,401	179,664	132,979	124,102	84,921	120,472	34,511		
Ash	155,678	16,966	18,162	20,970	24,030	23,881	18,575	8,505	8,722	13,506	2,361		
Cottonwood	32,144	2,050	1,305	2,358	4,462	4,557	3,949	4,316	1,495	2,240	5,412		
Basswood	275	275	--	--	--	--	--	--	--	--	--		
Yellow-poplar	180,741	8,309	11,605	18,574	18,425	26,850	27,438	19,836	18,054	28,214	3,436		
Bay and magnolia	25,413	9,685	6,974	2,350	2,741	1,195	1,709	759	--	--	--		
Black cherry	12,633	3,542	3,139	1,594	2,849	849	282	--	--	378	--		
Black walnut	3,052	--	700	424	--	--	--	--	--	927	--		
Sycamore	11,959	699	--	681	509	560	421	1,239	1,051	4,496	2,303		
Black locust	--	--	--	--	--	--	--	--	--	--	--		
Elm	--	--	--	--	--	--	--	--	--	--	--		
Other eastern hardwoods	58,533	6,208	6,784	8,040	11,541	6,940	3,566	6,737	3,065	5,082	570		
Total hardwoods	145,800	38,091	32,064	21,187	21,299	9,672	6,962	3,327	5,107	6,222	1,869		
Total hardwoods	4,224,923	423,657	495,487	522,305	566,211	536,410	432,708	354,242	260,948	477,684	155,271		
All species	7,669,448	697,721	911,082	1,010,594	1,083,295	1,013,224	847,517	679,746	473,604	766,542	186,123		

Table 35.--Volume of growing stock on timberland, by species and diameter class, Northern Coastal Plain of South Carolina, 1986

Species	All classes	Diameter class (inches at breast height)												29.0 and larger
		5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9				
----- Thousand cubic feet -----														
Softwood														
Longleaf pine	370,672	24,113	36,548	64,924	82,812	69,720	53,248	28,022	8,099	2,507			679	
Slash pine	154,540	31,308	50,761	31,347	18,623	10,694	6,364	2,590	2,853			--		
Shortleaf pine	52,828	4,318	7,809	10,838	14,503	6,406	2,404	2,791	1,260	2,499			--	
Loblolly pine	2,277,702	173,699	260,248	299,341	324,336	321,607	277,435	241,533	158,801	208,149			12,553	
Pond pine	242,643	20,636	31,845	43,920	45,696	35,786	32,181	20,278	8,357	3,944			--	
Virginia pine	--	--	--	--	--	--	--	--	--	--			--	
Pitch pine	--	--	--	--	--	--	--	--	--	--			--	
Table Mountain pine	--	--	--	--	--	--	--	--	--	--			--	
Spruce pine	7,624	--	258	465	--	2,313	2,767	589	--	1,232			--	
Sand pine	--	--	--	--	--	--	--	--	--	--			--	
Eastern white pine	--	--	--	--	--	--	--	--	--	--			--	
Eastern hemlock	--	--	--	--	--	--	--	--	--	--			--	
Spruce and fir	--	--	--	--	--	--	--	--	--	--			--	
Baldcypress	239,229	7,968	12,960	18,899	21,398	20,132	30,654	24,981	28,361	59,831			14,045	
Pondcypress	58,810	4,641	7,408	11,335	7,416	6,914	6,821	3,247	3,893	7,135			--	
Cedars	6,139	980	1,796	988	--	415	490	510	453	507			--	
Total softwoods	3,410,187	267,663	409,633	482,057	514,784	473,987	412,364	324,541	212,077	285,804			27,277	
Hardwood														
Select white oaks	147,062	7,047	14,204	18,629	24,991	17,147	16,639	15,302	11,677	17,495			3,931	
Select red oaks	64,882	2,952	1,480	5,313	7,925	6,935	4,473	8,194	6,640	14,221			6,749	
Chestnut oak	--	--	--	--	--	--	--	--	--	--			--	
Other white oaks	100,629	7,525	10,627	10,037	11,614	8,932	8,246	5,164	5,096	17,832			15,556	
Other red oaks	719,303	72,136	87,910	85,509	85,118	66,095	64,582	64,442	42,430	113,985			37,096	
Hickory	101,218	6,330	13,181	10,428	10,935	11,990	10,141	8,206	6,165	16,913			6,929	
Yellow birch	--	--	--	--	--	--	--	--	--	--			--	
Hard maple	309	--	309	--	--	--	--	--	--	--			--	
Soft maple	296,897	49,388	46,712	43,794	43,452	32,989	31,590	20,051	11,474	14,808			2,639	
Beech	3,640	--	572	386	405	--	1,361	369	--	547			--	
Sweetgum	750,113	74,511	98,822	104,452	116,091	107,792	79,377	47,600	42,551	66,295			12,622	
Tupelo and blackgum	960,228	59,193	90,231	112,692	126,146	153,893	117,871	111,090	73,326	92,896			22,890	
Ash	130,181	11,060	13,014	16,706	21,147	20,837	15,888	8,158	8,045	12,965			2,361	
Cottonwood	30,854	1,557	1,305	2,358	4,462	4,557	3,543	4,316	1,104	2,240			5,412	
Basswood	275	275	--	--	--	--	--	--	--	--			--	
Yellow-poplar	172,664	7,304	11,163	17,388	17,794	25,872	26,529	19,836	17,325	27,287			2,166	
Bay and magnolia	15,976	5,672	4,238	1,945	2,004	687	1,127	303	--	--			--	
Black cherry	6,427	2,328	1,640	614	1,345	500	--	--	--	--			--	
Black walnut	1,694	--	269	424	--	--	1,001	--	--	--			--	
Sycamore	11,666	699	--	681	509	560	421	1,239	1,051	4,496			2,010	
Black locust	--	--	--	--	--	--	--	--	--	--			--	
Elm	--	--	--	--	--	--	--	--	--	--			--	
Other eastern hardwoods	47,454	5,609	5,189	5,820	9,950	5,097	2,956	5,505	3,065	4,263			--	
	56,805	4,027	8,379	5,455	12,459	6,850	5,867	3,327	4,790	4,934			717	
Total hardwoods	3,618,277	317,613	409,245	442,631	496,347	470,733	391,612	323,102	234,739	411,177			121,078	
All species	7,028,464	585,276	818,878	924,688	1,011,131	944,720	803,976	647,643	446,816	696,981			148,355	

Table 36.--Volume of sawtimber on timberland, by species and diameter class, Northern Coastal Plain of South Carolina, 1986

Species	All classes	Diameter class (inches at breast height)							
		9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0 and larger
----- Thousand board feet -----									
Softwood									
Longleaf pine	1,588,609	265,386	398,542	374,224	306,658	171,018	51,232	16,636	4,913
Slash pine	325,507	113,457	86,202	55,826	36,185	15,715	18,122	--	--
Shortleaf pine	193,785	40,872	65,690	33,086	13,347	16,509	7,940	16,341	--
Loblolly pine	9,723,132	1,075,951	1,465,132	1,657,080	1,567,210	1,457,998	1,003,513	1,405,049	91,199
Pond pine	936,952	164,946	211,163	184,161	179,528	119,480	51,699	25,975	--
Virginia pine	--	--	--	--	--	--	--	--	--
Pitch pine	--	--	--	--	--	--	--	--	--
Table Mountain pine	--	--	--	--	--	--	--	--	--
Spruce pine	40,611	2,058	--	12,067	15,350	3,490	--	7,646	--
Sand pine	--	--	--	--	--	--	--	--	--
Eastern white pine	--	--	--	--	--	--	--	--	--
Eastern hemlock	--	--	--	--	--	--	--	--	--
Spruce and fir	--	--	--	--	--	--	--	--	--
Baldcypress	1,089,935	55,596	81,987	88,175	147,913	128,228	152,982	346,310	88,744
Pondcypress	208,136	36,238	29,404	30,766	32,913	16,803	21,137	40,875	--
Cedars	18,056	4,093	--	2,092	2,789	2,992	2,793	3,297	--
Total softwoods	14,124,723	1,758,597	2,338,120	2,437,477	2,301,893	1,932,233	1,309,418	1,862,129	184,856
Hardwood									
Select white oaks	491,643	--	85,786	68,969	75,161	74,829	61,342	100,539	25,017
Select red oaks	287,809	--	26,947	29,145	21,552	41,982	36,054	86,713	45,416
Chestnut oak	--	--	--	--	--	--	--	--	--
Other white oaks	358,163	--	41,505	36,577	37,362	24,880	26,446	97,550	93,843
Other red oaks	2,360,702	--	318,701	287,146	308,059	327,490	226,666	659,069	233,571
Hickory	342,363	--	38,103	48,779	46,051	40,363	31,769	95,118	42,180
Yellow birch	--	--	--	--	--	--	--	--	--
Hard maple	--	--	--	--	--	--	--	--	--
Soft maple	638,395	--	142,027	125,625	133,484	91,549	54,681	76,369	14,660
Beech	10,489	--	1,482	--	5,300	1,470	--	2,237	--
Sweetgum	2,230,285	--	416,015	462,247	382,794	248,381	236,790	400,139	83,919
Tupelo and blackgum	3,038,564	--	399,785	585,430	510,043	522,710	369,352	508,453	142,791
Ash	380,675	--	68,142	80,635	69,207	38,633	40,149	70,045	13,864
Cottonwood	126,279	--	14,947	18,832	16,419	21,661	5,770	13,093	35,557
Basswood	--	--	--	--	--	--	--	--	--
Yellow-poplar	695,145	--	63,339	112,448	130,000	106,864	99,105	168,585	14,804
Bay and magnolia	15,565	--	6,482	2,725	4,925	1,433	--	--	--
Black cherry	6,437	--	4,403	2,034	--	--	--	--	--
Black walnut	3,852	--	--	--	3,852	--	--	--	--
Sycamore	52,925	--	1,536	2,211	1,734	5,908	5,255	24,323	11,958
Black locust	--	--	--	--	--	--	--	--	--
Elm	128,223	--	33,910	19,884	12,754	25,055	14,607	22,013	--
Other eastern hardwoods	169,600	--	43,446	27,326	27,006	15,140	24,964	27,256	4,462
Total hardwoods	11,337,114	--	1,706,556	1,910,013	1,785,703	1,588,348	1,232,950	2,351,502	762,042
All species	25,461,837	1,758,597	4,044,676	4,347,490	4,087,596	3,520,581	2,542,368	4,213,631	946,898

Table 37.--Volume of sawtimber on timberland, by species, size class, and tree grade, Northern Coastal Plain of South Carolina, 1986

Species	All size classes					Trees 15.0 inches d.b.h. and larger				
	Tree grade					Tree grade				
	All grades	1	2	3	4	All grades	1	2	3	4
----- Thousand board feet -----										
Softwood										
Yellow pine ^a	12,808,596	4,431,033	2,421,047	5,956,516	--	6,602,753	3,006,206	1,318,029	2,278,518	--
Eastern white pine ^b	--	--	--	--	--	--	--	--	--	--
Spruce and fir ^b	--	--	--	--	--	--	--	--	--	--
Cypress ^c	1,298,071	716,339	275,194	292,766	13,772	975,905	716,339	185,283	64,949	9,334
Other eastern softwoods ^b	18,056	1,366	--	7,811	8,879	11,871	--	--	2,992	8,879
Total	14,124,723	5,148,738	2,696,241	6,257,093	22,651	7,590,529	3,722,545	1,503,312	2,346,459	18,213
Hardwood^c										
Select white and red oaks	779,452	273,684	226,560	257,758	21,450	568,605	273,684	177,683	112,678	4,560
Other white and red oaks	2,718,865	718,938	727,906	1,012,045	259,976	2,034,936	718,938	636,755	528,108	151,135
Hickory	342,363	100,477	106,837	121,533	13,516	255,481	100,477	90,293	59,863	4,848
Yellow birch	--	--	--	--	--	--	--	--	--	--
Hard maple	--	--	--	--	--	--	--	--	--	--
Sweetgum	2,230,285	669,434	691,738	812,843	56,270	1,352,023	669,434	452,439	215,101	15,049
Ash, walnut, and black cherry	390,964	128,585	106,795	143,428	12,156	235,750	128,585	57,786	42,144	7,235
Yellow-poplar	695,145	217,520	186,095	258,408	33,122	519,358	217,520	143,086	140,622	18,130
Other eastern hardwoods	4,180,040	1,210,850	1,268,086	1,496,239	204,865	2,754,392	1,210,850	876,458	545,586	121,498
Total	11,337,114	3,319,488	3,314,017	4,102,254	601,355	7,720,545	3,319,488	2,434,500	1,644,102	322,455
All species	25,461,837	8,468,226	6,010,258	10,359,347	624,006	15,311,074	7,042,033	3,937,812	3,990,561	340,668

^aFor yellow pines, tree grade is based on "Southern Pine Tree Grades for Yard and Structural Lumber," Research Paper SE-40, published by the Southeastern Forest Experiment Station, Asheville, NC, 1968. Tree grade 4 does not apply to yellow pine.

^bFor other softwoods (excluding cypress), tree grade is based on "Tree Grades for Eastern White Pine," Research Paper NE-214, published by the Northeastern Forest Experiment Station, Broomall, PA, 1971.

^cFor hardwoods and cypress, tree grades 1, 2, and 3 are based on "Hardwood Tree Grades for Factory Lumber," Research Paper NE-333, published by the Northeastern Forest Experiment Station, Broomall, PA, 1976. Grade 4 trees are sawtimber trees not qualifying as tree Grades 1, 2, or 3. The butt log of these trees qualify as construction (tie and timber) logs based on "A Guide to Hardwood Log Grading (revised)," General Technical Report NE-1, published by the Northeastern Forest Experiment Station, Broomall, PA, 1971.

Table 38.--Cubic volume in the merchantable saw-log portion of sawtimber trees on timberland, by species and diameter class, Northern Coastal Plain of South Carolina, 1986

Species	All classes	Diameter class (inches at breast height)							
		9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0 and larger
----- Thousand cubic feet -----									
Softwood									
Longleaf pine	286,330	53,959	75,767	66,359	51,622	27,479	7,990	2,482	672
Slash pine	63,146	24,512	16,921	10,154	6,183	2,551	2,825	--	--
Shortleaf pine	36,877	8,794	13,164	6,108	2,339	2,750	1,248	2,474	--
Loblolly pine	1,711,188	233,018	291,631	304,124	269,120	237,626	157,179	206,064	12,426
Pond pine	175,259	35,559	41,974	34,176	31,376	19,995	8,275	3,904	--
Virginia pine	--	--	--	--	--	--	--	--	--
Pitch pine	--	--	--	--	--	--	--	--	--
Table Mountain pine	--	--	--	--	--	--	--	--	--
Spruce pine	7,088	404	--	2,198	2,685	581	--	1,220	--
Sand pine	--	--	--	--	--	--	--	--	--
Eastern white pine	--	--	--	--	--	--	--	--	--
Eastern hemlock	--	--	--	--	--	--	--	--	--
Spruce and fir	--	--	--	--	--	--	--	--	--
Baldcypress	199,050	13,191	18,123	18,068	28,350	23,456	26,893	57,363	13,606
Pondcypress	41,901	8,870	6,547	6,353	6,402	3,091	3,737	6,901	--
Cedars	3,123	838	--	391	468	491	439	496	--
Total softwoods	2,523,962	379,145	464,127	447,931	398,545	318,020	208,586	280,904	26,704
Hardwood									
Select white oaks	91,612	--	17,528	13,880	14,600	13,960	10,946	16,839	3,859
Select red oaks	48,968	--	5,441	5,671	3,934	7,425	6,168	13,689	6,640
Chestnut oak	--	--	--	--	--	--	--	--	--
Other white oaks	63,917	--	8,426	7,333	7,194	4,649	4,710	16,730	14,875
Other red oaks	410,787	--	61,616	54,402	56,273	57,867	38,856	106,500	35,273
Hickory	62,410	--	7,971	9,884	8,882	7,428	5,675	15,933	6,637
Yellow birch	--	--	--	--	--	--	--	--	--
Hard maple	--	--	--	--	--	--	--	--	--
Soft maple	126,718	--	29,670	26,159	26,803	17,684	10,300	13,629	2,473
Beech	2,272	--	295	--	1,159	325	--	493	--
Sweetgum	402,475	--	81,669	89,131	70,588	43,962	40,294	64,340	12,491
Tupelo and blackgum	594,068	--	90,092	125,434	102,445	99,862	67,306	87,015	21,914
Ash	74,930	--	14,586	16,958	13,904	7,419	7,462	12,314	2,287
Cottonwood	22,180	--	2,974	3,717	3,105	3,929	1,020	2,143	5,292
Basswood	--	--	--	--	--	--	--	--	--
Yellow-poplar	120,419	--	12,260	21,289	23,496	18,360	16,411	26,459	2,144
Bay and magnolia	3,173	--	1,318	577	999	279	--	--	--
Black cherry	1,348	--	938	410	--	--	--	--	--
Black walnut	853	--	--	--	853	--	--	--	--
Sycamore	9,254	--	305	445	345	1,102	953	4,188	1,916
Black locust	--	--	--	--	--	--	--	--	--
Elm	25,010	--	6,955	4,072	2,524	4,824	2,736	3,899	--
Other eastern hardwoods	29,957	--	8,263	5,165	4,677	2,901	4,074	4,255	622
Total hardwoods	2,090,351	--	350,307	384,527	341,781	291,976	216,911	388,426	116,423
All species	4,614,313	379,145	814,434	832,458	740,326	609,996	425,497	669,330	143,127

Table 39.--Total volume of live trees on timberland, by species and diameter class, Northern Coastal Plain of South Carolina, 1986

Species	All classes	Diameter class (inches at breast height)											
		1.0- 2.9	3.0- 4.9	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0 and larger
		----- Thousand cubic feet -----											
Softwood													
Longleaf pine	444,960	3,122	11,787	33,332	44,322	75,523	94,599	78,603	59,747	31,342	9,038	2,792	753
Slash pine	205,235	1,723	15,248	44,160	61,441	36,310	21,131	12,035	7,123	2,888	3,176	--	--
Shortleaf pine	66,767	1,317	3,097	6,168	9,604	12,698	16,572	7,254	2,712	3,137	1,413	2,795	--
Loblolly pine	2,826,394	40,683	109,486	251,422	321,715	352,915	372,073	366,228	314,259	271,796	178,630	233,155	14,032
Pond pine	303,594	3,086	9,787	29,586	39,987	52,763	53,248	41,331	36,893	22,997	9,459	4,457	--
Virginia pine	--	--	--	--	--	--	--	--	--	--	--	--	--
Pitch pine	--	--	--	--	--	--	--	--	--	--	--	--	--
Table Mountain pine	--	--	--	--	--	--	--	--	--	--	--	--	--
Spruce pine	8,646	--	--	--	320	535	--	2,621	3,124	663	--	1,383	--
Sand pine	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern white pine	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern hemlock	--	--	--	--	--	--	--	--	--	--	--	--	--
Spruce and fir	--	--	--	--	--	--	--	--	--	--	--	--	--
Baldcypress	310,921	1,471	6,165	12,495	17,082	23,871	26,589	25,554	37,771	30,335	33,967	74,179	21,442
Pondcypress	85,526	2,013	3,619	7,660	10,707	15,509	9,504	8,783	8,603	4,450	4,876	9,291	511
Cedars	13,964	1,507	3,284	1,775	2,337	1,415	--	486	786	607	557	1,210	--
Total softwoods	4,266,007	54,922	162,473	386,598	507,515	571,539	593,716	542,895	471,018	368,215	241,116	329,262	36,738
Hardwood													
Select white oaks	205,572	4,042	7,251	11,195	19,579	24,726	31,319	21,876	21,609	19,490	14,445	23,600	6,440
Select red oaks	86,516	1,284	1,418	4,299	1,903	6,963	11,117	8,571	5,508	10,598	8,686	17,907	8,262
Chestnut oak	--	--	--	--	--	--	--	--	--	--	--	--	--
Other white oaks	179,381	6,555	9,218	16,220	16,797	14,911	17,997	16,013	11,643	9,437	7,097	30,634	22,859
Other red oaks	1,147,649	46,220	78,122	128,307	126,586	117,306	119,662	88,932	87,227	82,806	58,441	156,475	57,565
Hickory	152,555	6,193	8,621	10,499	18,971	15,728	14,581	15,993	12,718	10,570	7,404	22,272	9,005
Yellow birch	--	--	--	--	--	--	--	--	--	--	--	--	--
Hard maple	1,754	349	202	554	649	--	--	--	--	--	--	--	--
Soft maple	650,069	59,968	84,053	96,420	76,855	69,177	66,191	57,353	49,261	33,850	19,884	29,253	7,804
Beech	7,434	362	204	--	894	488	506	--	2,301	458	346	1,462	413
Sweetgum	1,111,238	55,024	91,797	128,756	134,599	135,081	142,398	130,124	92,497	56,040	50,248	77,473	17,201
Tupelo and blackgum	1,582,378	56,209	80,283	111,472	139,360	169,290	182,971	222,237	163,709	153,365	105,070	152,394	46,018
Ash	240,159	28,350	26,122	24,011	22,314	24,823	27,945	27,496	21,310	9,729	9,953	15,415	2,691
Cottonwood	39,035	552	555	2,856	1,627	2,810	5,247	5,305	4,577	5,000	1,723	2,576	6,207
Basswood	343	--	--	343	--	--	--	--	--	--	--	--	--
Yellow-poplar	213,410	2,152	4,121	11,127	13,820	21,502	21,048	30,406	30,962	22,290	20,300	31,706	3,976
Bay and magnolia	76,402	21,768	20,439	14,847	8,819	2,876	3,294	1,442	2,007	910	--	--	--
Black cherry	26,977	5,868	5,162	4,933	3,869	1,916	3,443	999	330	--	--	457	--
Black walnut	3,930	--	223	--	866	514	--	--	1,190	--	--	1,137	--
Sycamore	14,288	137	139	935	--	809	597	651	489	1,435	1,214	5,190	2,692
Black locust	46	46	--	--	--	--	--	--	--	--	--	--	--
Elm	84,427	4,211	8,578	8,935	8,573	9,758	13,757	8,283	4,258	7,894	3,579	5,939	662
Other eastern hardwoods	344,041	80,238	72,811	56,096	41,730	26,698	26,238	11,792	8,401	4,035	6,150	7,562	2,290
Total hardwoods	6,167,604	379,528	499,319	631,805	637,811	645,376	688,311	647,473	519,997	427,907	314,540	581,452	194,085
All species	10,433,611	434,450	661,792	1,018,403	1,145,326	1,216,915	1,282,027	1,190,368	991,015	796,122	555,656	910,714	230,823

Table 40.--Green weight of forest biomass on timberland, by species and diameter class, Northern Coastal Plain of South Carolina, 1986

Species	All classes	Diameter class (inches at breast height)											
		1.0- 2.9	3.0- 4.9	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0 and larger
----- Hundred thousand pounds -----													
Softwood													
Longleaf pine	348,979	2,610	10,068	23,920	33,722	58,750	74,555	62,559	47,606	25,150	7,242	2,204	593
Slash pine	161,254	1,295	14,195	32,614	48,148	28,663	16,683	9,455	5,521	2,245	2,435	--	--
Shortleaf pine	46,332	735	1,910	3,544	6,601	9,042	11,982	5,241	1,981	2,267	1,011	2,018	--
Loblolly pine	2,039,303	20,493	64,569	179,326	239,066	260,550	273,886	268,163	228,311	196,947	129,797	168,162	10,033
Pond pine	214,792	1,686	5,456	20,570	28,493	37,806	38,268	29,605	26,528	16,486	6,739	3,155	--
Virginia pine	--	--	--	--	--	--	--	--	--	--	--	--	--
Pitch pine	--	--	--	--	--	--	--	--	--	--	--	--	--
Table Mountain pine	--	--	--	--	--	--	--	--	--	--	--	--	--
Spruce pine	6,022	--	--	--	205	367	--	1,813	2,196	467	--	974	--
Sand pine	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern white pine	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern hemlock	--	--	--	--	--	--	--	--	--	--	--	--	--
Spruce and fir	--	--	--	--	--	--	--	--	--	--	--	--	--
Baldcypress	238,459	770	3,871	6,350	10,794	16,313	19,653	19,418	29,601	24,042	27,535	61,497	18,615
Pondcypress	55,706	1,157	2,269	3,431	5,894	9,577	6,368	6,140	6,228	3,334	3,683	7,186	439
Cedars	9,738	938	2,108	1,265	1,672	1,126	--	398	604	418	379	830	--
Total softwoods	3,120,585	29,684	104,446	271,020	374,595	422,194	441,395	402,792	348,576	271,356	178,821	246,026	29,680
Hardwood													
Select white oaks	171,068	3,276	5,474	7,863	15,590	20,340	26,206	18,443	18,282	16,669	12,533	20,605	5,787
Select red oaks	74,947	1,082	1,086	2,767	1,527	5,744	9,385	7,379	4,858	9,433	7,677	16,322	7,687
Chestnut oak	--	--	--	--	--	--	--	--	--	--	--	--	--
Other white oaks	152,131	4,736	6,630	11,148	13,327	12,499	15,294	14,214	10,361	8,466	6,315	28,139	21,002
Other red oaks	918,754	39,483	59,568	90,528	101,945	96,279	98,009	73,240	72,473	68,112	47,857	126,315	44,945
Hickory	127,299	5,401	7,593	7,635	14,820	12,829	12,033	13,369	10,702	9,001	6,312	19,554	8,050
Yellow birch	--	--	--	--	--	--	--	--	--	--	--	--	--
Hard maple	1,485	297	169	454	565	--	--	--	--	--	--	--	--
Soft maple	472,234	45,573	59,885	66,365	57,928	50,828	48,837	42,156	35,845	24,650	14,140	20,768	5,259
Beech	6,415	291	171	--	757	381	410	--	1,994	428	324	1,256	403
Sweetgum	799,335	36,682	61,060	82,985	95,251	97,679	104,400	96,790	69,817	42,611	38,524	59,953	13,583
Tupelo and blackgum	1,101,343	37,966	54,830	55,410	85,060	109,839	123,579	156,851	118,670	115,123	80,192	123,132	40,691
Ash	149,972	17,380	16,596	17,574	15,808	16,468	17,308	16,256	12,124	5,562	5,484	8,102	1,310
Cottonwood	27,703	363	394	1,735	1,049	1,884	3,582	3,716	3,310	3,646	1,277	1,945	4,802
Basswood	213	--	--	213	--	--	--	--	--	--	--	--	--
Yellow-poplar	152,059	1,588	2,764	6,647	9,323	14,981	14,939	21,939	22,436	16,167	14,977	23,279	3,019
Bay and magnolia	45,792	13,397	12,539	7,604	5,369	1,798	2,110	987	1,362	626	--	--	--
Black cherry	16,384	2,567	3,450	2,871	2,580	1,292	2,333	689	253	--	--	349	--
Black walnut	3,392	--	184	--	726	428	--	--	1,052	--	--	1,002	--
Sycamore	10,648	89	98	461	--	553	397	456	366	1,073	926	4,114	2,115
Black locust	35	35	--	--	--	--	--	--	--	--	--	--	--
Elm	55,420	3,061	5,987	5,493	5,391	6,360	8,798	5,433	2,877	5,236	2,311	4,001	472
Other eastern hardwoods	281,399	67,466	66,212	43,550	33,426	21,448	19,650	8,453	6,051	3,409	4,562	5,613	1,559
Total hardwoods	4,568,028	280,733	364,690	411,303	460,442	471,630	507,270	480,371	392,833	330,212	243,411	464,449	160,684
All species	7,688,613	310,417	469,136	682,323	835,037	893,824	948,665	883,163	741,409	601,568	422,232	710,475	190,364

Table 41.--Net annual growth and removals of live timber and growing stock on timberland, by species, Northern Coastal Plain of South Carolina, 1985

Species	Live timber ^a		Growing stock	
	Net annual growth	Annual timber removals	Net annual growth	Annual timber removals
	----- Thousand cubic feet -----			
Softwood				
Yellow pines	171,968	160,268	169,811	156,490
Eastern white pine	--	--	--	--
Spruce and fir	--	--	--	--
Cypress	7,484	3,990	7,271	3,755
Other eastern softwoods	423	73	394	73
Total softwoods	179,875	164,331	177,476	160,318
Hardwood				
Select white and red oaks	6,375	4,714	6,326	4,321
Other white and red oaks	28,484	21,372	27,927	19,279
Hickory	2,257	2,634	2,215	2,270
Yellow birch	--	--	--	--
Hard maple	26	--	23	--
Sweetgum	22,217	25,803	21,756	24,449
Ash, walnut, and black cherry	3,366	4,059	3,107	3,433
Yellow-poplar	6,495	3,075	6,433	3,075
Tupelo and blackgum	14,824	10,785	14,270	9,274
Bay and magnolia	887	250	793	224
Other eastern hardwoods	17,347	10,839	15,515	7,278
Total hardwoods	102,278	83,531	98,365	73,603
All species	282,153	247,862	275,841	233,921

^aMerchantable portion only.

Table 42.--Net annual growth and removals of sawtimber on timberland, by species, Northern Coastal Plain of South Carolina, 1985

Species	Net annual growth	Annual timber removals
<u>Thousand board feet</u>		
Softwood		
Yellow pines	744,242	638,372
Eastern white pine	--	--
Spruce and fir	--	--
Cypress	38,111	16,666
Other eastern softwoods	696	278
Total softwoods	783,049	655,316
Hardwood		
Select white and red oaks	29,898	17,082
Other white and red oaks	105,943	63,740
Hickory	8,434	9,588
Yellow birch	--	--
Hard maple	--	--
Sweetgum	76,789	85,627
Ash, walnut, and black cherry	10,907	11,413
Yellow-poplar	33,314	12,466
Tupelo and blackgum	61,804	32,610
Bay and magnolia	494	424
Other eastern hardwoods	44,660	23,304
Total hardwoods	372,243	256,254
All species	1,155,292	911,570

Table 43.--Annual removals of growing stock on timberland, by species and diameter class, Northern Coastal Plain of South Carolina, 1985

Species	All classes	Diameter class (inches at breast height)									
		5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0 and larger
		----- Thousand cubic feet -----									
Softwood											
Yellow pines	156,490	11,506	19,605	24,208	26,342	27,721	18,928	11,524	8,186	7,443	1,027
Eastern white pine	--	--	--	--	--	--	--	--	--	--	--
Spruce and fir	--	--	--	--	--	--	--	--	--	--	--
Cypress	3,755	208	324	--	436	405	570	214	182	970	446
Other eastern softwoods	73	--	--	73	--	--	--	--	--	--	--
Total softwoods	160,318	11,714	19,929	24,281	26,778	28,126	19,498	11,738	8,368	8,413	1,473
Hardwood											
Select white and red oaks	4,321	34	309	517	109	662	793	422	1,072	241	162
Other white and red oaks	19,279	1,830	2,562	2,264	1,947	1,524	1,786	1,615	1,844	1,839	2,068
Hickory	2,270	56	127	86	355	326	105	244	129	691	151
Yellow birch	--	--	--	--	--	--	--	--	--	--	--
Hard maple	--	--	--	--	--	--	--	--	--	--	--
Sweetgum	24,449	2,057	1,744	2,976	2,272	5,180	3,038	3,047	1,267	2,716	152
Ash, walnut, and black cherry	3,433	396	423	97	473	376	594	--	271	674	129
Yellow-poplar	3,075	90	476	--	532	518	334	511	208	255	151
Tupelo and blackgum	9,274	285	794	874	1,506	1,404	1,109	1,062	683	1,256	301
Bay and magnolia	224	53	--	79	--	--	--	--	92	--	--
Other eastern hardwoods	7,278	670	433	908	816	1,105	858	843	246	1,224	175
Total hardwoods	73,603	5,471	6,868	7,801	8,010	11,095	8,617	7,744	5,812	8,896	3,289
All species	233,921	17,185	26,797	32,082	34,788	39,221	28,115	19,482	14,180	17,309	4,762

Table 44.--Mortality of live timber, growing stock, and sawtimber on timberland, by species, Northern Coastal Plain of South Carolina, 1985

Species	Live timber ^a	Growing stock	Sawtimber
	<u>Thousand</u> - - <u>cubic feet</u> - -		<u>Thousand</u> <u>board feet</u>
Softwood			
Yellow pines	20,464	19,695	53,230
Eastern white pine	--	--	--
Spruce and fir	--	--	--
Cypress	851	792	1,523
Other eastern softwoods	220	134	--
Total softwoods	21,535	20,621	54,753
Hardwood			
Select white and red oaks	701	587	2,302
Other white and red oaks	10,965	7,628	27,821
Hickory	763	590	2,552
Yellow birch	--	--	--
Hard maple	57	--	--
Sweetgum	5,018	4,102	11,904
Ash, walnut, and black cherry	1,947	814	1,502
Yellow-poplar	1,007	823	3,477
Tupelo and blackgum	5,394	3,081	7,976
Bay and magnolia	192	82	348
Other eastern hardwoods	13,398	6,937	19,825
Total hardwoods	39,442	24,644	77,707
All species	60,977	45,265	132,460

^a Merchantable portion only.

Table 45.--Change in number of live trees on timberland, by species group, survey completion date, and diameter class, Northern Coastal Plain of South Carolina

Species group and year	All classes	Diameter class (inches at breast height)							
		1.0- 2.9	3.0- 4.9	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0 and larger
		----- <u>Thousand trees</u> -----							
Yellow pine									
1978	724,484	270,549	175,915	111,187	66,775	39,735	26,445	16,025	17,853
1986	638,551	224,294	147,993	103,291	64,085	38,486	25,119	15,690	19,593
Change	-85,933	-46,255	-27,922	-7,896	-2,690	-1,249	-1,326	-335	+1,740
Other softwood									
1978	48,690	20,085	10,711	6,104	3,033	2,774	1,729	1,460	2,794
1986	43,949	17,220	9,510	4,919	3,592	2,780	1,661	1,099	3,168
Change	-4,741	-2,865	-1,201	-1,185	+559	+6	-68	-361	+374
Hardwood									
1978	2,948,613	2,090,828	468,557	166,713	86,829	50,239	32,504	21,820	31,123
1986	2,515,741	1,721,192	411,659	164,821	86,203	47,846	31,973	21,129	30,918
Change	-432,872	-369,636	-56,898	-1,892	-626	-2,393	-531	-691	-205

Table 46.--Land area, by land use class, major forest type, and survey completion date, Northern Coastal Plain of South Carolina

Land use class	Survey completion date			Change 1978-1986
	1968	1978	1986	
----- Acres -----				
Forest land				
Timberland:				
Pine and oak-pine types	2,557,680	2,600,595	2,511,636	-88,959
Hardwood types	2,125,526	2,150,891	2,063,239	-87,652
Total	4,683,206	4,751,486	4,574,875	-176,611
Reserved timberland	19,000	16,652	32,713	+16,061
Woodland	10,436	3,893	--	-3,893
Total forest land	4,712,642	4,772,031	4,607,588	-164,443
Nonforest land				
Cropland	1,881,316	1,709,100	1,738,390	+29,290
Pasture and range	177,009	150,762	124,675	-26,087
Other	623,617	747,778	896,013	+148,235
Total	2,681,942	2,607,640	2,759,078	+151,438
All land^a	7,394,584	7,379,671	7,366,666	-13,005

^aExcludes all water areas.

Table 47.--Volume^a of sawtimber, growing stock, and live timber on timberland, by species group, survey completion date, and diameter class, Northern Coastal Plain of South Carolina

Species group and year	All classes	Diameter class (inches at breast height)								
		5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0 and larger
SAWTIMBER (in thousand board feet)										
Softwood										
1968	10,937,770	--	--	1,537,662	2,059,142	2,085,063	1,874,448	1,263,134	874,178	1,244,143
1978	12,973,990	--	--	1,748,760	2,380,569	2,471,881	2,212,829	1,603,818	1,000,911	1,555,222
1986	14,124,723	--	--	1,758,597	2,338,120	2,437,477	2,301,893	1,932,233	1,309,418	2,046,985
Hardwood										
1968	8,713,822	--	--	--	1,363,518	1,524,178	1,505,977	1,224,575	916,014	2,179,560
1978	10,745,622	--	--	--	1,578,803	1,856,635	1,767,427	1,443,241	1,145,023	2,954,493
1986	11,337,114	--	--	--	1,706,556	1,910,013	1,785,703	1,588,348	1,232,950	3,113,544
GROWING STOCK (in thousand cubic feet)										
Softwood										
1968	2,806,081	271,800	342,386	426,536	459,938	412,557	341,554	216,142	143,732	191,436
1978	3,265,859	271,052	407,363	485,160	531,678	489,050	403,240	274,423	164,579	239,314
1986	3,410,187	267,663	409,633	482,057	514,784	473,987	412,364	324,541	212,077	313,081
Hardwood										
1968	2,847,447	248,738	327,279	360,191	408,851	380,189	332,739	247,639	173,652	368,169
1978	3,412,208	283,396	367,279	426,596	473,378	463,086	390,522	291,830	217,081	499,040
1986	3,618,277	317,613	409,245	442,631	496,347	470,733	391,612	323,102	234,739	532,255
LIVE TIMBER ^b (in thousand cubic feet)										
Softwood										
1968	2,883,478	292,680	358,370	439,715	467,359	417,011	344,040	217,130	145,974	201,199
1978	3,354,537	292,586	426,400	500,225	540,426	494,345	406,229	275,719	167,126	251,481
1986	3,444,525	274,064	415,595	488,289	517,084	476,814	414,809	325,504	212,656	317,710
Hardwood										
1968	3,575,333	381,399	449,566	466,422	499,945	455,860	380,142	285,310	201,677	455,012
1978	4,277,334	434,950	504,393	552,593	578,832	555,254	446,125	336,192	252,161	616,834
1986	4,224,923	423,657	495,487	522,305	566,211	536,410	432,078	354,242	260,948	632,955

^aTo provide a basis for valid comparisons, adjustments have been made to allow for differences in volume tables and sawtimber specifications used in previous surveys.

^bMerchantable volume.

Tansey, John B.

Forest statistics for the Northern Coastal Plain of South Carolina, 1986. Resour. Bull. SE-91. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station; 1987. 54 pp.

Since 1978 in the Northern Coastal Plain of South Carolina, area of timberland has declined by 177,000 acres--a reduction of 4 percent. The rate of plantation establishment is up in all ownerships; however the area harvested annually exceeds the total area regenerated by 3 percent. Net annual growth of both softwood and hardwood growing stock has declined by 9 and 27 percent, respectively. Mortality of softwood growing stock has declined by more than 26 percent, whereas hardwood mortality is up by 37 percent. Annual softwood removals have increased by 18 percent, and hardwood removals by 22 percent. Despite these facts, net annual growth of both softwood and hardwood still exceeds annual removals by at least a slight margin in most ownership classes.

KEYWORDS: Land use trends, timberland ownership, timber growth, timber removals.

Tansey, John B.

Forest statistics for the Northern Coastal Plain of South Carolina, 1986. Resour. Bull. SE-91. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station; 1987. 54 pp.

Since 1978 in the Northern Coastal Plain of South Carolina, area of timberland has declined by 177,000 acres--a reduction of 4 percent. The rate of plantation establishment is up in all ownerships; however the area harvested annually exceeds the total area regenerated by 3 percent. Net annual growth of both softwood and hardwood growing stock has declined by 9 and 27 percent, respectively. Mortality of softwood growing stock has declined by more than 26 percent, whereas hardwood mortality is up by 37 percent. Annual softwood removals have increased by 18 percent, and hardwood removals by 22 percent. Despite these facts, net annual growth of both softwood and hardwood still exceeds annual removals by at least a slight margin in most ownership classes.

KEYWORDS: Land use trends, timberland ownership, timber growth, timber removals.



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